REHABILITATION RECORD

May and June 1972

The Creation In Recreation

RECREATION AND REHABILITATION

Timothy J. Nugent

Recreation, or the wise use of leisure, has been and shall continue to play an ever increasing role of importance in the lives of all people. Its importance increases in magnitude and significance when related to individuals who are ill or who have a disability; those who, because of unfortunate circumstances beyond their control and because of society's apathy, more than by personal desire, have had an excess of leisure and have been prone to inactivity; those who, because of man-made physical barriers and attitudinal barriers, have often been denied the opportunity to participate and thereby have been denied experiences in growth and development which greatly enrich one's life.

From childhood through adulthood, leisure (play, recreation, avocational interests) is instrumental in fulfilling our basic socio-psychological needs and oftentimes our physical needs. Most of us have had the opportunity to try many things, some by trial and error, some with success and others with failure, some "just for kicks," most often during our leisure. Via these routes, we have been privileged to broaden our interests and talents and to develop a concept of self which is essential to success, to health, and to happiness.

Recreation is a means to involve everyone. It rightfully draws from all areas of interest and endeavor such as the arts and crafts, music and rhythmics, drama, literature, the sciences, vigorous activities, individual sports and team sports, plus the passive appreciation of all of the aforementioned in leisure.

Whatever the particular problem of the individual or the particular setting—hospital, clinic, institution or community—in recreation the individual becomes a participant and is not a patient or client, allowing for normal reciprocities between people and people, and people and things. This is one of the most significant contributions that recreation makes.

We must look beyond the center or the institution in which we work, beyond our professional disciplines, our categorical concepts, and our limitations on disability if we are to fully meet the needs and serve the interests of individuals with specific disabilities or problems. Recreation as a professional endeavor or the wise use of leisure on the part of the individual are realistic avenues for achieving this.

Recreation has proven to be one of the most effective means of projecting individuals with disabilities or with unique problems into normal environs and breaking down man-made attitudinal and physical barriers. It has also been a means by which individuals with disabilities can overcome self consciousness, develop self confidence and develop those skills and the appreciation of those skills which can be a common denominator to all people.

Some of the most significant knowledge we have gained concerning the lives of individuals with disabilities in areas of physical tolerance, socialization, medical treatment, and many others has come through recreation and vigorous physical activity.

In the life of the individual, recreation is ultimately self-motivating, self-satisfying, and self-evaluating. There is no conflict between the principle of recreation for the sake of recreation on the part of the individual participant and recreation as a means for bringing about rehabilitation and socialization on the part of the professional. Through proper programming, the two can greatly enhance each other.

Within this edition of *Rehabilitation Record* are several examples of the initiative, ingenuity, creativeness, and innovativeness to be found among individuals with various disabilities or problems and those that are privileged and dedicated to working with them. You will also find examples of how recreation has contributed to better public understanding and acceptance of individuals who are unique and how recreation has served as a significant tool in helping individuals to recognize and solve their problems or overcome their disabilities.

Professor Nugent is Director, Rehabilitation-Education Services, and the Rehabilitation Education Center, University of Illinois, Champaign, Ill.

Psychological Contributions of Dance to the Adjustment of the Deaf

Peter R. Wisher, Ed.D.

After a decade of teaching dance to the deaf, I feel that participation in this activity has much to contribute to total education in general and to personal adjustment in particular. This same feeling does not seem to be shared by other educators, since inclusion of dance into the curricula for the deaf has either been ignored or given but minimal attention.

Education is often described as a process that strives to produce desirable changes in the behavior of individuals. The development of a satisfactory personal adjustment should be a primary consideration in any educational plan. The dance can be of service in achieving this desirable end.

That a serious problem of personal adjustment exists today is recognized by educators both of the hearing and of the deaf. In regard to the general population, Cole and Bruce feel that, "the public conscience had been awakened to the number of immature and poorly organized persons we were turning out in our schools." [1] As for the deaf, Mylklebust states that, "the area of emotional adjustment is one of the most neglected of all problems in the psychology of deafness." [2]

Dr. Wisher is Chairman, Department of Physical Education and Athletics, Gallaudet College.

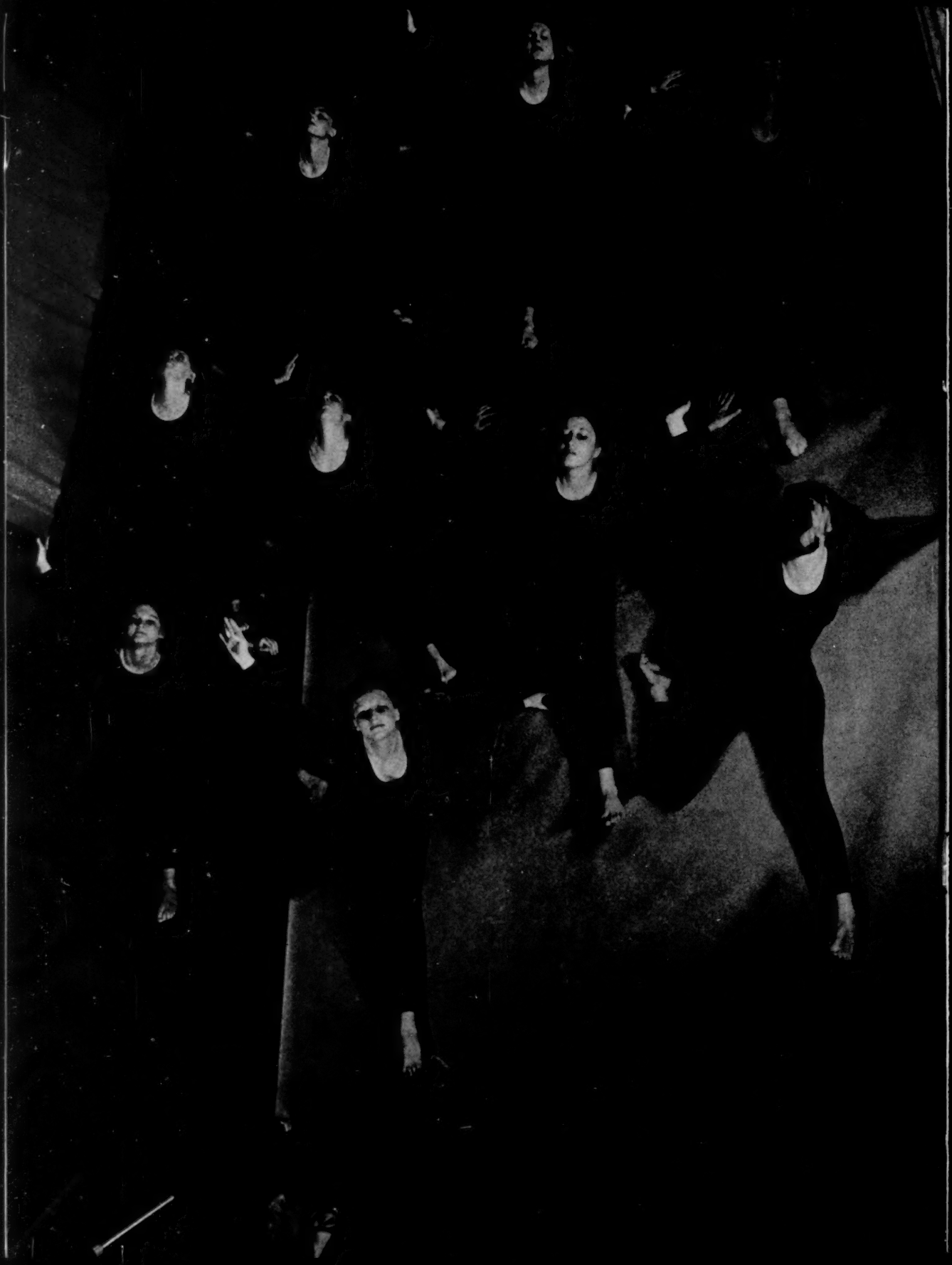
Personal adjustment is conceived as an individual's characteristic behavior pattern as shown by the manner in which he generally reacts to situations. No single aspect of development—intellectual, emotional, physical, social—can be studied as an entity; all are bound together inextricably, and can be understood only when viewed in relation to each other.

For the purpose of this discussion I would like to consider dance in a broad sense as rhythmic body movements executed with or without music, and including all dance forms, from elementary rhythmic play games through highly sophisticated creative dances.

Intellectual Adjustment

When one looks at the general scholastic achievement of the deaf, one sees a depressing picture. They are retarded from 4 to 7 years behind their hearing peers.[3] The primary cause of this situation is that deafness interferes with normal acquisition of oral and written language, and the third language to which most deaf resort—the language of signs—has inherent limitations as far as intellectual development is concerned.

The results of some studies have indicated that the deaf are weak in concept formation and in ability to think in abstract terms.[4] There is much reason



to surmise that these differences may be due to linguistic deficiencies.

In general, there is a close correlation between unsuccessful adjustment and lack of intellectual development.

Dance experience can contribute much to the intellectual development of the deaf. Purposeful motor activity should be instrumental in promoting physical growth and development, and furthermore, "physical efficiency and the efficiency of learners are closely related." [5]

Rowan states, "for children language and movement go together." [6] The dance setting is ideal for the introduction of new concepts, words, principles; the relaxed environment encourages oral practice. In this regard, Dr. De Sa feels that, "the rhythm in movements of the body developed in association with qualities of music eventually becomes the rhythm of speech." [7]

As for conceptual improvement, "as children work with rhythm patterns in movement, understanding of number concepts will evolve." [8] As for dealing in the abstract, anyone who has taught dance movement is well aware of the principle that for any movement to become dance it must be "abstract," otherwise it is not dance.

Emotional Adjustment

Altshuler [9] and Levine [10] have reported the following emotional problems in the deaf population:

(1) through school years the deaf children resort to frequent outbursts of rage, (2) they demonstrate frequent frustration patterns, (3) they seem to possess marked emotional immaturity, and (4) they appear to be egocentric. It might be interesting to note that a study by the New York State Psychiatric Institute revealed that the deaf felt that hearing people tended to dislike, pity, and misunderstand them.[11]

A physician, T. E. Shaffer, makes a statement that suggests a general antidote for the negative traits attributed to the deaf: "the need for activity is present from earliest infancy, but it is heightened in adolescence. I believe, muscular activity, creative, or aggressive, is a mechanism for relief from stresses and anxieties which occur at this time . . . and he needs to have release through activity.[12]

Dance has long been recognized as an effective means for the reduction of tensions. Although the main responsibility of the school is instruction and not therapy, it is obviously desirable to gain concomitant therapy by providing an environment where students can externalize feelings, beliefs, and fears through dance.

Physical Adjustment

Physical development of the deaf is generally normal, so no great special problems resulting from deafness affect this aspect of adjustment. However, proper physical development is important for its beneficial effects on other adjustment components of either the hearing or the deaf. Even if "full physical stature does not guarantee intellectual and emotional maturity," [13] still, "personality depends on the properly functioning body machine." [14] It may be added that physical deviation from the normal can cause emotional problems. The teacher has an important role here, not only to be competent in dance, but to be aware of possible causes that might lead to maladjustments.

It is imperative that the student make an effort to acquire proficiency; no one wants to dance or socialize with a person who is not skilled. It would seem reasonable to think that a skilled deaf person would have fewer emotional problems and be more acceptable socially to both the deaf and the hearing.

"The human body should be considered as the outer aspect of personality, for it is the agent through which we receive impressions from the external world and by which we communicate our meaning. . . . for it is only in art that all aspects of man's complex nature are united in expression." [15]

Social Adjustment

The social life of the deaf is greatly affected by their degree of facility in communication. Because very often language deficiencies interfere with normal relations with the hearing, they turn to other deaf in order to satisfy social needs.

Since deaf people tend to feel that hearing people "dislike, pity, and misunderstand them," [16] it is no wonder they seek the company of other deaf persons. Some writers refer to this situation as a subculture, implying that it is a form of isolation from the hearing society that is presumably undesirable. On the contrary, I feel that it serves a useful function in the lives of the deaf, by permitting them to gain social experience with their peers. However, I believe that the deaf should not mingle solely with one another; social experience with the hearing is also needed.

Historical Note

Through the history of mankind, dance has played an important role in the life of man. It would be difficult indeed to find any society, past or contemporary, which did not have some form of dance. Early man, finding words inadequate, or perhaps being inarticulate, resorted to dance as a means of expressing himself, and in so doing realized certain satisfactions. Suitable dances were composed for all important events in tribal life. Each area of the world developed dance indigenous to its culture. The U.S. has made, and is continuing to make, contributions in such dance forms as tap, modern, ballroom, country dancing and theatre dance. The latter is often referred to as modern jazz. One can readily see that the various dances are a result of the era and culture in which they materialized.

Here again, dance can help. Throughout history man has expressed himself through dance. Since it involves groups of people, it becomes a social experience.

That the deaf enjoy dancing and have achieved a high degree of success as dancers has been demonstrated at Gallaudet College. A group of deaf student dancers has traveled all over the U.S. and Canada and has appeared on national television in both countries. Their latest sojourn involved a trip to Paris, France, where they performed at the meeting of the World Federation of the Deaf and UNESCO. One can see the tremendous effect this type of exposure has on the deaf participants: they seem to be more socially at ease with hearing people; tendency toward isolation is negated; they are enriched through new education experiences. Within the group as it functions in practice sessions, in travel, and in performance, many social lessons are learned. Positive social outcomes result from exposure to and participation in dance.

Total Personality Served

I have pointed out the beneficial effects of dance on the intellectual, emotional, physical, and social components that in their sum make up personality adjustment.

These thoughts are ably and succinctly expressed by H'Doublen: "of all the arts, dance is peculiarly suited to such a fulfillment of personality. It serves all ends of individual growth; it helps develop the body; it stimulates the imagination and challenges the intellect; it helps cultivate an appreciation for beauty; and it deepens and refines the emotional nature." [17]

The dance then should not be considered simply as an end in itself but as an effective means of assisting the deaf individual to live in harmony with himself, the deaf, and the hearing.

Following is a fragment of a poem written by a deaf girl. It expresses her feelings toward the dance and its meaning in her life:

". . . I feel the rhythm of music in my soul. I dance, and know I'm master of the art. For dancing is like music on the whole, they give both joy and solace to the heart.

Then let me murmur not, with loving care God made me feel His music everywhere" [18]

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(3) Peterson, A. and Hallberg, E. C. *Family and Mental Health Problems in a Deaf Population.* Department of Medic Genetics, New York State Psychiatric Institute. Columbia University, New York, p. 117, 1965.

(4) *Family and Mental Health Problems in a Deaf Population, Op. cit.,* p. 8.

(5) Cole, *Op. Cit.,* p. 174.

(6) Rowan, B. *Learning Through Movement.* Teachers College, Columbia University, New York City, p. 10.

(7) *Report of the Proceedings of the International Congress on the Education of the Deaf . . . Op. Cit.,* p. 1075.

(8) Rowan, *Op. Cit.,* p. 2.

(9) Altshuler, L. "Psychological Contributions in the School Age Deaf." *American Annals of the Deaf.* 107, 553–559, 1962.

(10) *Family and Mental Health Problems in a Deaf Population. Op. Cit.*

(11) Myklebust, H. *The Psychology of Deafness.* New York, p. 129, 1960.

(12) *Report of the Proceedings of the International Congress on the Education of the Deaf . . . Op. Cit.,* p. 267.

(13) Cole, *Op. Cit.,* p. 107.

(14) *Ibid.* p. 560.

(15) *Background Readings for Physical Education.* Holt, Rinehart, Winston Inc. New York, p. 207.

(16) Myklebust, *Op. Cit.,* p. 129.

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AMERICA'S MAJOR DISEASES

Loneliness
Anxiety
Boredom

Frank R. Mark, M.D.

One notes with increasing frequency discussions and articles relating to the "poor quality of life" in correctional institutions, detention centers, chronic disease hospitals, mental institutions, nursing homes, old age homes, and centers and homes for youth. Overall it appears that governmental and voluntary agencies and hard working professionals and volunteers are unable to cope adequately with this problem, and others in communities often feel relatively helpless and paralyzed in getting involved and making contributions. Perhaps one should analyze the concept, "poor quality of life," and examine its various components.

I would like to focus on the problems of loneliness, anxiety, boredom, and cultural deprivation which obviously are major problems for persons confined in the above-mentioned facilities or in their homes. Upon random examination of such places, one notes that most confined persons must endure between 4 and 14 hours of loneliness, anxiety, and/or boredom per day. Many such persons are consigned to such a pattern and fate for the rest of their lives and will personally be unable to alter it due to their confinement and the associated problems, be they reasons of health or socioeconomic maladjustment.

It is estimated that a large proportion of our population, between 10 and 20 percent, have these

Dr. Mark is Special Assistant to the Administrator, Health Services and Mental Health Administration, HEW. He has also been designated as the coordinator of the 1976 Federal health activities related to the country's celebration of its bicentennial.

A visitor to Hillside Hospital's (Ohio) Rehab Hall is greeted by a profusion of greenery. The greenhouse not only serves as the lobby's center of attraction, but is also used in the rehabilitation program. At left, an occupational therapist encourages a patient to cultivate plants and a "green thumb."

Photo: Courtesy News & Views, State of Ohio Rehabilitation Services Commission.

problems at any given time. Admittedly, they affect primarily the institutionalized and aged. There are others, however, with similar problems, such as the culturally deprived. Furthermore, most of the rest of our population will probably be faced with these problems at some time in the future, either directly or indirectly, and for varying periods of time.

Their attitudes and activities are to a large part dependent upon the sensory input that is available (things they can see, hear, feel, smell, and touch), and partly upon the role expected of them, based on their prior experiences and hearsay. The major question we should ask ourselves is whether the sensory input available to persons confined (and the others) is adequate to prevent or alleviate problems of loneliness, anxiety, and boredom or whether important benefits would accrue by further examining the available sensory inputs.

For most facilities the question hardly needs to be raised because it is obvious that they are drab, grim, and uninteresting, hardly the type of places that human beings should spend time in, and most certainly not persons who are confined there due to physical and mental illnesses or other reasons.

It becomes apparent that we can usually alter the sensory input in a positive direction by introducing high-interest items into the immediate environment and/or by altering or modifying the design and decor of the facility itself. Essentially, to me, this means two things: first, the introduction of multi-item, high interest hobby-type kits; and second, modifying such facilities into "cultural" facilities.

The Hobby Kit

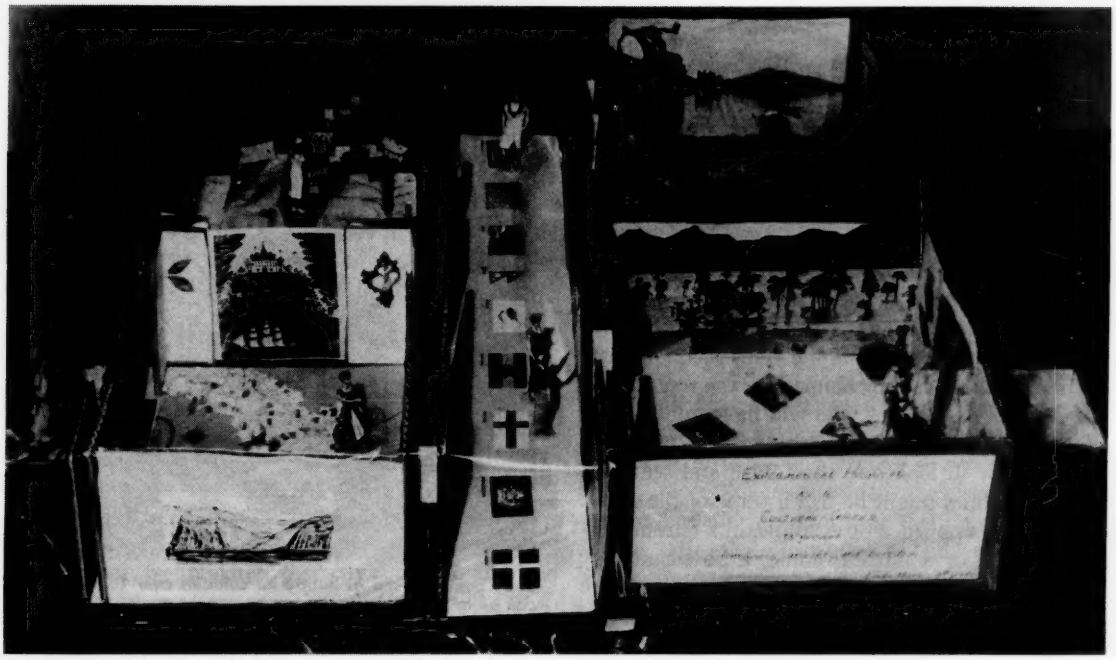
It is difficult to know what a confined person's (or visitor's) past and present interests are or what items would stimulate interest or conversation. For this reason, one develops hobby kits containing numerous (often hundreds) of interesting items. These items can be in cardboard boxes, attache cases or even mobiles, such as a converted baby carriage. The items can mostly be surplus materials found in homes, schools, libraries, stores, churches, etc., or can be obtained inexpensively in most communities. For example, one of our converted doll carriage kits contains hundreds of items including books, old magazines, museum handouts, maps, pictures, various small collections (shells, coral, coins, minerals, etc.), games, puzzles, travel folders, magic items, materials for arts and crafts, items of historic and cultural interests, such as replicas of old documents, etc.

Most of the items in such kits were selected on the basis of having visual, tactile or odor sense appeal. Many are humorous or gimmicky. At times they project the user into a different setting. Generally, they make good conversation pieces or lead to activities. Some stimulate visitors to bring additional items. Most are relatively inexpensive, compact, and light. They are not perishable. Many do not require prolonged concentration. Most items can be used by all sorts of confined persons, visitors, and volunteers.

A few small trials using such kits in hospitals and for homebound patients indicate that such kits are tremendously appreciated by patients and their families. A time study indicates that the kits were used over and over again for prolonged periods of time by both the patients, members of their families, and visitors. Such kits can be developed by almost anyone in a community, particularly by groups such as school classes, scouts, women's clubs, church groups, etc.

Following is an excerpt of a letter from a 20-year-old lady who used one of our kits for 3 months while recuperating at home from a severe automobile accident:

> Thank you for the use of your "Fantasy on Wheels." Its many surprises kept me and my family and friends occupied for many hours. Its use for me during my recent illness was twofold. To begin with, the items in it brought me many hours of enjoyment. I fully enjoyed going through all the items in the carriage. I never tired of looking at the many different things in the carriage. The books were interesting.
>
> Secondly I particularly enjoyed watching my family and friends go through it. Generally the initial reaction was "so what?" However, once they began looking through it, nothing could break them away. One of my friends compared the carriage to a voodoo doll. Instead of pins to curse a person, there are fun things to cure a person. My mother referred to your project as "funcraft."
>
> The magazines fascinated the 18–26 age group—I gather this may have been because the magazines were before our times. It seems funny to see a magazine without advertisement. The shoes, hair-styles, bathing suits, dresses, etc. gave us a chuckle. Many people commented that in just a few more years people will be laughing at the way we dress and wear our hair now.



Rough mockup of a hospital as a community center.

Obviously, there is no end to the possible content of such kits, and it can be a continuing challenge to make them as interesting as possible. One can well visualize the day when numerous different types of kits assembled by family members, friends, and volunteers will be available in a given facility and that they will continuously be used and exchanged among the confined persons. Furthermore, one can conceptualize that various ongoing programs in a community, such as schools (or individual classrooms), have continuous relationships throughout the years with a variety of facilities that could use their products, for example, science and arts and crafts projects.

The Cultural Facility

Regarding facility design, construction, and decor, the present trend of "aluminum, glass, and concrete" facilities for chronic disease hospitals, nursing homes, correctional institutes, and old age homes, without major provisions for human related and changing inputs (sensory) for confined persons, is indeed a step in the wrong direction in terms of preventing loneliness, anxiety, and boredom. A culturally sterile environment should be avoided by all means. Needed are facilities where most rooms and their components are relatively unique—where no two rooms are alike. The walls, floors, and ceilings should have different designs, patterns, furnishings, drawings, color schemes, etc. The walls should permit for changing pictures, projections, or exhibits. Provisions for storage of multihobby kits should be made. Adequate closed-in exhibit space should be provided in hallways so that local collectors and educational institutions will be attracted to the facility to exhibit their collections and to discuss them.

Many groups throughout the community should contribute to designing the various rooms, such as the arts and crafts groups from local high schools and colleges. Some space should be made available for local, talented groups, such as musicians, artists, and drama groups so that they may at least hold their rehearsals or some classes in such facilities.

A few animal pens should be provided which could be cared for by some of the children in the community (scouts), making possible contact between the inmates, for example, the elderly, and children. The development of such cultural facilities would attract numerous persons in the community who have talents and who at this time are not contributing to the isolated and culturally have-not populations.

Implication for Planners

The above concepts have obvious implications for future health planners, facility architects, governmental agencies charged with the responsibility for various confined persons, planners for new recreational industries, superintendents of school systems, etc. It is obvious that new standards of care will have to be developed which take into account the need for cultural care. It makes only partial sense to keep persons alive but give them nothing to live for in terms of spiritual values, useful activities, and future hope for an interesting life. This is equally true for persons who will be confined for the rest of their lives as it is for persons who will have only limited confinement.

Let us try to look into the future and see what various facilities might be like if some of the above concepts are applied. For example, in a chronic disease hospital or a nursing home, a physician may not only have prescribed for a patient's medical care but also for his cultural care to prevent loneliness, anxiety, and boredom. In the mornings, different multihobby kits may be wheeled into his room. During the day, he may walk throughout the facility and look at different demonstrations or talk to other patients regarding various aspects of their hobby kits and/or the materials decorating their rooms.

A few volunteers from the local high school or college may stop by to discuss the products of their classroom activities. A member of the family or a neighbor may bring some items and discuss them with the patient. A few volunteers in the hospital may be putting together a new kit or refurbishing some that have been used. Volunteers in some of the local churches may be out collecting surplus items from parishioners and/or developing kits and dropping them off at a local correctional institution. A few students from a home economics class or student club may be making home visits to homebound patients, bringing along various kits that they have made up in class. Some of the students may even have gone out to old age homes and helped in the redecorating of rooms, halls, etc. The local band or orchestra may be rehearsing in an old age home.

One can go on and on with possible activities involving large numbers of presently interested and talented people in our communities. Anyone who thinks that these are senseless dreams had better face up to what the present sordid state of affairs is and what the future may hold in store for him, his family, and his friends. Further, he may wish to contemplate on the potential benefits for future volunteers, especially the presently idle or "copped out."

Baby carriage used as hobby kit contains over 100 items. Kits can be contained in boxes or even attache cases.

Precepts Demonstrated

For the past few months, we have had a small PREVLAB (Prevention of Loneliness, Anxiety, and Boredom) demonstration at the Health Services and Mental Health Administration, Parklawn Building, U.S. Department of Health, Education, and Welfare. It is essentially designed to indicate what the problems are and various do-it-yourself approaches, as discussed above, including a small exhibit of a variety of multihobby kits and of a small-scale "hospital as a cultural center" model.

The feedback regarding the demonstration so far by both health professional persons interested in the aged, and others, indicates that the problems discussed above are extremely serious, that some of the approaches suggested are highly relevant, and that various groups such as volunteers are willing to experiment with some of the approaches.

As we look ahead to the 1976 United States Bicentennial Celebration, should we not perhaps set as National, community, or, in some cases, institutional goals the elimination of loneliness, anxiety, and boredom—people serving people in order to make ours a more human society? ■

Using Color in a Geriatric Facility

The following article is reprinted with permission from *Hospital & Community Psychiatry,* September 1971. The author is James W. Ramage, A.C.S.W., Acting Program Coordinator, Northwestern Alabama Mental Health Center, Hamilton, Alabama.

Today's geriatric facilities are a far cry from the poorly staffed and designed ones of the past decade. However, where interior color schemes are concerned, most geriatric wards and nursing homes continue to have a drab, clinical appearance that is often depressing to the patients. Well-planned color schemes can encourage the patients to participate in activities by making the environment more pleasant, and can improve the patients' ability to function despite the degenerative processes that usually accompany old age. For example, because most elderly patients suffer from poor eyesight or color blindness, those factors should be prime considerations in selecting the color schemes.

Individualizing each room with color makes it easier for the patient to find his own room. When patients share a room, the furnishings used by each should be differentiated, such as by the color or pattern of the bedspreads. Because the institution is often a permanent home for elderly patients, they should participate in decisions about any change in the decor of their room.

Attention should be paid to the color, size, and arrangement of furniture, to help keep patients from stumbling into it; for example, it should contrast sharply with the color of the walls and floors. The use of visibly different textures is also helpful. Different-colored doors will distinguish the closet from the hall or the bathroom, and handles or switches can be made readily identifiable through color or luminescence.

Bathroom fixtures can be confusing to the patient. If the fixtures are light-colored porcelain or stainless steel, paint the wall immediately behind them a dark color. That will make them easier to locate and will reduce the glare of their reflective surfaces.

Brightly colored corridors can entice patients from their rooms to participate in activities. The use of color in corridors can also help patients get about more easily. A colored stripe on the floor, a foot or so from the wall, helps them judge distances or guide their wheelchair or walker. Handrails are more obvious if brightly painted, and rooms can be more easily identified if the doors are of different colors and bear large, raised numbers and names.

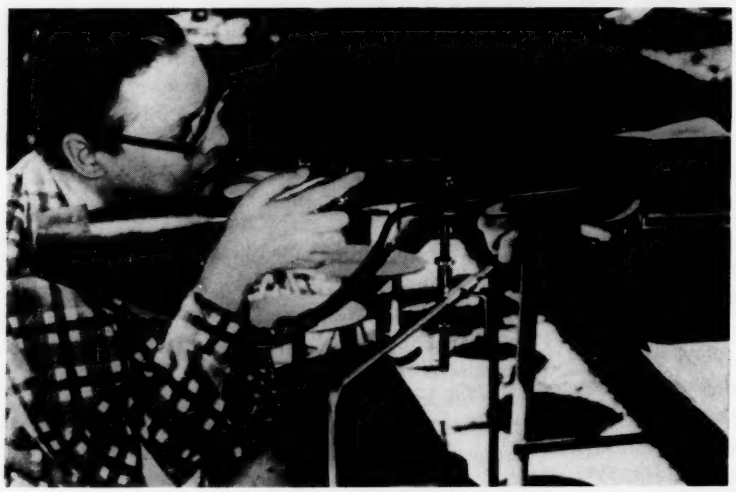
Patients often gather around the nursing station because it gives them a feeling of security. When bright, happy colors are added, the station becomes a more pleasant place for both the patients and the nursing staff; the nurses' task of being cheerful and helpful to patients is made easier.

Rehabilitation areas should be functional as well as inviting. Because these areas are constantly being rearranged, the background should be versatile. In physiotherapy rooms, dull, darker colors will reduce the glare of equipment and permit more intense lighting. Color should be used to alter the clinical appearance of the room and its equipment; unless the room looks as warm and as unclinical as possible, patients will become tense and will resist therapy.

Meals can be made more attractive and appetizing when served in pleasant surroundings. For example, an all-white color scheme is cold and uninviting, and also creates difficulties for patients with limited vision. As in other areas, colors should be contrasted to make the furnishings stand out. If tablecloths are not used, the tables should be edged with bright metal or plastic strips. Colorful trays and dishes can often make the meal look even more attractive. Foods also should be prepared with an eye to color.

Properly used color will make it easier for geriatric patients to function, and will lessen their dependence on the personnel. Thus they will be encouraged to take a more active part in programs, with increased confidence and sense of security. Even those who are unable to be physically active can be mentally stimulated by more colorful surroundings. A person's need for an attractive environment is just as real at 80 as it is at 18.

Ready on the Firing Line



Besides living all of his waking hours in a wheelchair, Nick Hott does many things. For one, he is the Texas Institute for Rehabilitation and Research business manager. For another, he is a gun enthusiast.

Target shooting is his game, a form of recreation that is much like bowling but does not require physical mobility. Nick maintains that some people who are too handicapped to knock down a pin can derive pleasure from "knocking down" a bull's-eye.

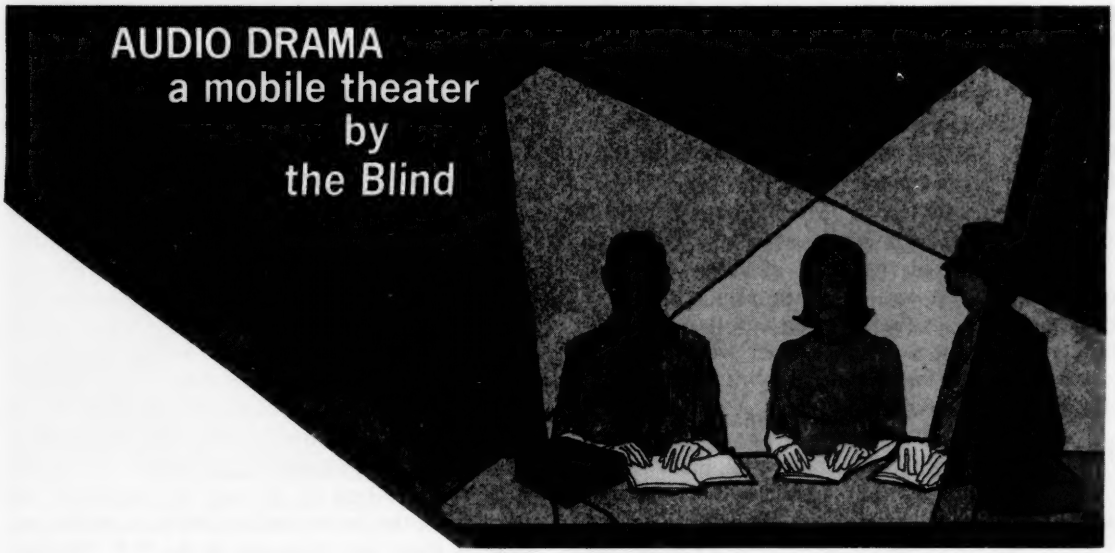
About two years ago Nick ordered a how-to-do-it manual on gun assembly. Since he has only partial use of his arms, he enlisted the help of a friend. Together they built a 1903 Springfield rifle. Nick asked his friend to fire the weapon for him while he watched. It worked perfectly!

But the more Nick watched, the more he wanted to himself fire the gun. He consulted the staff in the orthopedics department. Although they are more adept at building braces for legs and arms, the experts soon came up with an adjustable rifle holder. Now Nick spends a lot of spare time squeezing off shots at a local range. "He always is on target," his friend said, "and he hits the bull's-eye pretty well, too!"

Some of the most significant knowledge we have gained concerning the lives of individuals with disabilities in areas of physical tolerance, socialization, medical treatment, and many others has come through recreation and vigorous physical activity.

Timothy J. Nugent

AUDIO DRAMA a mobile theater by the Blind



David Swerdlow

Like troubadours of old, The Elbee Audio Players, our troupe of blind, amateur repertory thespians, travels around the greater New York area bringing dramatic reading productions of major plays to the community. Moving about in a miniature caravan of three cars, we have, for 10 seasons, performed at churches, temples, schools, and hospitals. In this intimate, personal, mobile theater, we don't even need a stage, sets or costumes, just a table and chairs and a receptive audience. Our plays, the best in the American and British theater, are heard instead of seen.

Adaptations for the handicapped are constantly being made so that we can function more effectively. Accordingly, Elbee has made certain effective adaptations of major plays, without sacrificing any of the artistic demands of the theater. Audio is not a short cut or a mere reading. It must be a rich, dramatic performance. The flavor and charm of the original play always remains. Although we are admittedly an amateur troupe, we strive for professionalism. We, too, grapple with problems of characterization, voice changes, and dramatic nuances.

Mr. Swerdlow is himself blind and, together with his sighted wife, Lillian, they direct the Elbee players.

The 10 years of our existence convince us that audio drama, as we have developed it, is particularly suited to blind and handicapped people.

I am not referring to attendance at the theater, watching television or just listening to radio or recordings. There should be more of this, of course. What I am urging is more direct, active participation in drama as performers by those of us able and willing to do so. A touch of creativity is in all of us!

Mary Switzer said it in these words: "It is extremely important from my point of view to emphasize the need for the enjoyment of the arts and the part that this enjoyment can play, not only in improving the quality (of living)—which, of course, it does—but also in certain situations in providing a very much needed therapeutic agent."

What is Audio Drama?

Someone will say: "Why, it is just like radio." It is. But with Elbee there is one major difference. Performances are live and never broadcast on television or radio.

Visually, an Elbee performance looks like this: We, the players are seated at a long table covered with a hot pink tablecloth—directly in front of the audience—not on a remote stage. Two tape recorders, one to record the play, the other for music and sound effects, are present; extension cords criss-

cross the floor. The whole effect is that of an exciting studio broadcast, except, as we've said, we perform live.

As our fingers fly across the Braille scripts, we dramatize the story with our voice alone. Although there is no physical action, audiences tell us that we achieve an extraordinary sense of dynamic movement. Entrances! Exits! Music! Sound effects! Changing scenes! Something is always happening.

We have chosen this form of drama in place of the fully-acted out, costumed play, favored by most organizations for the blind and handicapped, because we want a mobile theater which has immediacy, charm, fascination, and brings us as close as possible to our audience.

Elbee Is Born

In the summer of 1962, a group of us, blind men and women in New York City, feeling the need for creative self-expression and desiring to make our own contribution to the community, organized ourselves into the Elbee Players. We also invited a few sighted players to join us. After all, we do live in a blind and sighted community!

As most of us would have to use Braille scripts (indeed the whole project was based on Braille), we quite naturally took our name from the initials of Louis Braille, the man who did so much to open the vast treasures of music, literature, and drama for blind people. His ingenious system of raised dots was, and still is our Open Sesame.

Elbee's repertoire now consists of more than 35 plays, either in actual production or preparation. Each season we present five or six plays in repertory. In all we usually present about 20 performances annually. There is never an admission charge.

Rehearsals are held approximately once a week in a rigorous 3-hour session. We generally do the whole play at one sitting because we don't have to worry about costumes, sets or lighting. Consequently, we can concentrate on voice alone. This is an art which must be developed to the highest degree. If you think audio is easy because there is no memorizing of lines or physical movement, take a Braille or printed script, sit down at a table, and try to dramatize with your voice alone.

All the members of the cast are employed full time during the day at various jobs and professions. Most of them are graduates of the N.Y. Institute for the Education of the Blind. Several hold college degrees. They all travel independently to and from rehearsals, using a cane or guide dog. However, door-to-door transportation is provided for performances.

Player Views

Stephen Cassell (singer): What's most important in audio? You need good diction and a clear, distinct voice. There's nothing else with which to hold an audience. We never use microphones; we must project and be heard all the way to the back of the hall . . .

Karen Eisenstadt (teacher of handicapped): In audio drama, we can go anywhere in time and space. Scene changes are only a music break away. Although we may be playing to an audience of 300, our plays are intimate. The audience feels that we are playing to each one individually.

Kitty Gormley (instructor of blind children): Elbee does many plays each season which means that each player has an exciting variety of roles to do—and always new audiences . . . I really don't think audiences react to our blindness more than to the drama. Perhaps we gain initial sympathy (not that we ask for it) but Elbee couldn't possibly have survived on a diet of sympathy alone for 10 seasons!

Phylis Gurin (secretary): Audio is a challenge to a sighted player. In accomplishing so much with the voice alone there is a great sense of fulfillment. Even though we don't move about the stage, I don't

The Easter Seal Directory of Resident Camps for Persons with Special Health Needs. National Easter Seal Society for Crippled Children and Adults, 2023 West Ogden Ave., Chicago, Ill. 60612. $1.

More than 250 camps organized to serve children and adults with physical, mental, social, and/or emotional handicaps are listed in this book. Although the entries are contained under the State in which they are located, an index lists the camps by disability groups served and a second index gives an alphabetical listing.

Each entry supplies the following information: impairments served, name and location of camp, age range served, sessions, capacity, fees, availability of camperships, where to make inquiries, and other information, such as whether or not the camp is coed, availability of recreation specialists, area served, etc.

A counselor in New York's Industrial Home for the Blind day camper program introduces a young blind girl to the wonders of the surf.

PHOTO COURTESY I H B REPORTER

feel any sense of restraint. Never realized so much could be done with the voice. I now hear "colors" and "nuances" I never imagine were there. As I look at the audience, I see its attention, interest and fascination at this marvel—"A sitting down dramatic performance," as somebody called it. Hospital audiences are particularly intriguing. You can actually see them go from indifference to complete interest.

Marcia Stein (welfare department worker): I often wonder why more blind and handicapped people don't participate in amateur drama. Elbee is an experience in warm human relations. We all cooperate with each other, but there is always a reaching out to other people, giving them something of value, something to remember.

Sam Troia (student): I'm interested in writing music. There's a connection, you know, between drama and music. Both are in the area of creativity. To be creative always seemed to me to be a marvelous thing. . . . As for the roles I play—it's wonderful to see them come to life. Little by little, I practically become that character. Why it's a magical experience.

Cheryl Weiss (librarian): As a sighted player I have a problem. I want to move, especially my hands; make gestures. At first you have to practically sit on them; if the phone rings, you don't pick it up. You let it ring on the tape recorder (and besides in audio there is no phone, just the ring). The more you work in this form, the more you realize that all the action is in the script and you get a definite sense of movement.

Ted Hodel (sound effects engineer): In audio, music and sound effects prerecorded and played on cue are necessary. Scenes are bridged with musical "curtains;" mood created and the story moved along. I must be attuned to the players; they keep me on my toes. I have to come in with my music and sound effects at precisely the right moment—or else! When the play goes over effectively, I too get a great sense of accomplishment. In drama, team work is vital.

Inside The Drama

The blind and handicapped tend toward isolation. Any activity which takes us away from ourselves, even temporarily, is all to the good. The broader our horizon, the less we think of ourselves as "different."

Elbee is strictly a dramatic group. Not only do we come in contact with many people on our trips around the city, but we frequently get deeper insight into human emotions as well. The performing of many roles is not mere play acting. It compels us to study character development and motivation. We find ourselves constantly asking: "Why do people do the things they do?" A woman who has never been a mother can understand the emotions involved when she plays the role of a mother. When one of our company played the part of the President, he got a feeling of just what it meant to be Chief Executive of so vast a land. He said he frequently felt the weight and burden of his office—and so did we. For years, we could not resist calling him Mr. President.

Like everybody else, the Elbee players have personal problems—a death in the family, looking for employment, getting married, raising a family, adjusting to living in a sighted community. All these are sublimated, while we concentrate on bringing to life a play which is significant, full of wonder and beauty, and reflects the world around us. I don't think any of us can ever be quite the same again, once the magic of the theater has touched us.

Our Story Told and Retold

Naturally we want to tell our story wherever and whenever we can. There is now an inkprint Elbee portfolio in the permanent collection on amateur

drama at the Lincoln Center Museum and Library of the Performing Arts in New York City. In addition, five of our productions have been recorded on magnetic tape for the Library of Congress. These tapes are distributed to blind and physically handicapped American citizens everywhere. They are: *All About Eve* by J. L. Mankiewicz; *Come Blow Your Horn* by Neil Simon; *Marty* by Paddy Chayefsky; *Dear Me, The Sky Is Falling!* and *A Majority Of One* both by Leonard Spiegelgass . . . Also a Braille volume called *Drama At Your Fingertips* is available at most of the major schools and libraries for the blind here and abroad.

That we have come 10 seasons is due not only to our own efforts but to the encouragement and assistance of all our friends—the many outstanding authors who gave us permission to adapt their plays for audio presentation; our sponsoring committee of men and women prominent in the theatrical and literary worlds; volunteer Braille transcribers; kind and understanding contributors; and audiences everywhere.

Mary Switzer spoke of Elbee in the following words: "In the case of your group, you have the 'double take,' you might say, the satisfaction of being able to do 'your thing' with plays that are a delight. Just to read the titles makes me want to hear them all since most of them were my favorities when they appeared in the theater at first. Then you demonstrate that no matter what a person lacks in the physical sense, there is no concomitant lack of artistic and creative appreciation and ability." ■

Camping Tips For Retarded

The following is quoted from *M-R Quarterly,* a publication of the Department of Institutions, Social and Rehabilitation Services, Oklahoma. The ideas were set forth at a statewide conference on program development in physical education and recreation for the mentally retarded child held in Oklahoma City in April 1971.

Ernie Davis, physical education specialist, St. Paul, Minn., lists the following ideas for persons planning camping trips for the retarded.

Most important is that the counselor should merely outline activities and show the children techniques of doing chores around the campsite. Constant supervision gets in the way.

The "C" in camping, Davis says, is for concern or care. Care for the children's enjoyment and concern that they stay interested in the activities.

"A" is for attitude, action or attempt. Teachers should keep the children occupied with activities that interest them such as observing plants and animals. One does not need academics in camping—just the ability to learn from what one sees and hears.

"M" is for managing. How do you organize, gather equipment, find the money? Davis says money and equipment can be replaced with improvisations. Plastic sheeting can be made into tents; blankets, sheets, and plastic cloths make sleeping bags.

"P" stands for programing. Davis cautions against overprograming. There is a need to develop plans as the trip proceeds and the leader learns what interests the children.

Davis suggests a system of halfway points in all activities. When one or more of the children is tired, bored or disinterested in an activity, the leader can say "This is halfway and I'm going back. Anybody who wants to come can, those who want to stay can continue." The tired children return with the teacher, without feeling they have failed to complete the activity, while the others can continue.

The trip is for the benefit of the child so it is important to gear it to his interests and what he wants to learn. Once the child indicates what he wants to learn, it is the leader's duty to encourage and suggest new ways of doing things. This should be the primary goal of the trip.

A great variety of camping experiences are possible for the special child. Backyard camping, day camping, family camping, outdoor education, overnight trips, pioneer camping, residential, school ground or trip camping, weekend camping, wilderness camping and winter camping are among the possibilities for the retarded child. ■

Historical Overview of Recreation For The Retarded

B. L. Freeman, Ph. D., and Jean Mundy

The following article forms chapter one of a monograph entitled Habilitative Recreation for the Mentally Retarded. **The book was developed as part of a regional training program in mental retardation, and it was sponsored by the Center for Developmental and Learning Disorders, University of Alabama, Birmingham. The program is supported in part by RSA. The book is available at $1.50 each from the Center for Developmental and Learning Disorders, University of Alabama in Birmingham, 1720 Seventh Avenue, South, Birmingham 35233.**

In addition to the historical overview of recreation for the retarded presented here, the monograph discusses the philosophy of habilitative recreation, planning a program, and administrative problems that might arise in establishing and conducting such a program

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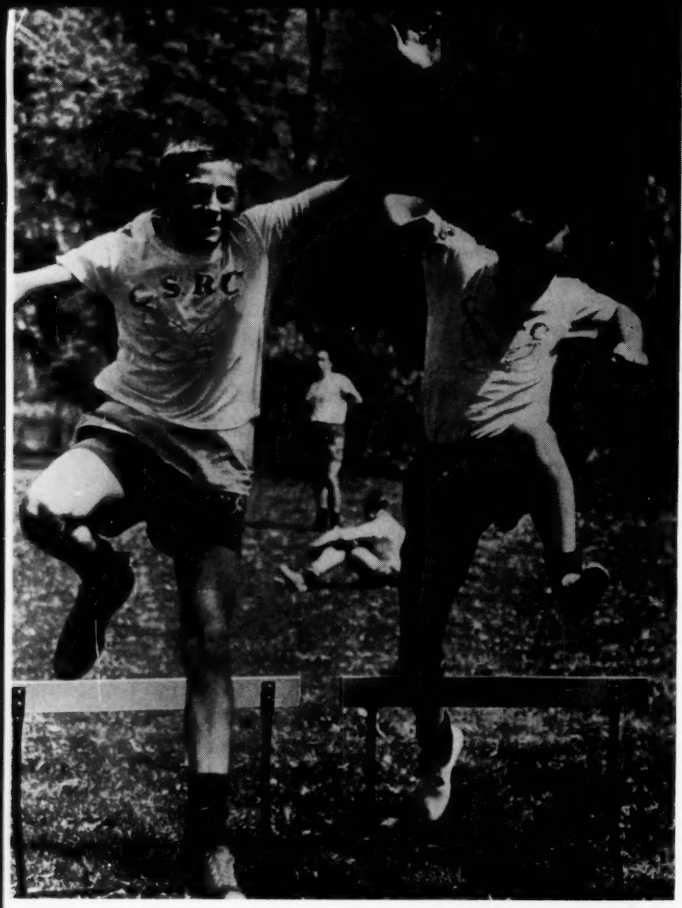
Recreation programs for the mentally retarded had their beginning primarily in State schools and hospitals over the nation which were established to serve the retarded population. In the early days of institutional programing the orientation of the personnel working in the institutional setting was toward a custodial philosophy. Within this framework the primary responsibility of the staff was perceived to be to keep the residents clean, well fed, and safe.

Recreation during this period was believed to have no paramedical value, nor play any part in the education of the mentally retarded. In many such complexes recreation was, for all practical purposes, nonexistent because it was thought to be useless or folly. Mrs. Eunice Kennedy Shriver described conditions existing in many institutions when she stated, "A few years ago my husband and I were constantly sickened by our visits to institutions for the mentally retarded . . . a dirty ball, inert in some corner, was often the only evidence of a 'recreation program.' Those few with even dull, monotonous work to do were the lucky ones."

As institutions grew and there were increasing numbers of individuals requiring services, recreation programs were initiated. The primary justification and purpose of recreation programs at this time was to be a time filler for the residents. Recreation was something that would keep the residents busy and break the routine of institution life. Second, the recreation programs were also used as a means of getting the residents off the wards or cottages to give the cottage parents or ward personnel a break. With the majority of a cottage out for a while, the cottage personnel would have time to accomplish the many housecleaning chores which might otherwise be prolonged or gone undone, and it was a good time to enjoy an unhurried cup of coffee and relaxed conversation.

A third justification for the existence of recreation in the institutions was the belief that it helped control behavior problems in the resident population. When residents were kept busy and happy it was thought that antisocial behavior would be decreased. A final justification and purpose of institutional recreation programs was to provide fun and enjoy-

Dr. Freeman is a program director at Hammond State School, Hammond, Louisiana, and Miss Mundy is a professor in the Department of Education, Winthrop College, Rock Hill, South Carolina.



No matter the height of the hurdle, an obstacle overcome is a source of great satisfaction.

ment for the individual participants, and possibly more stress and emphasis has been placed on this one aspect of recreation for the mentally retarded than any other single consideration.

While the custodial philosophy permeated the thinking of those working with the retarded, programs in institutions, day care centers, special schools, and municipal recreation departments tended to focus on "mass diversional activities," as it was expressed by one recreation director. Some of the most frequently used activities were train or bus rides, dances, swimming, and movies, and special events, such as carnivals, pageants, fairs, picnics, beach trips, and comparable activities could be found repeatedly on the recreation schedule. In many cases sports programs, such as volleyball, softball, or basketball were in evidence for the older, more highly skilled players. For those not athletically inclined, but who also exhibited better-than-the average skills, choral groups were formed.

Scheduling and grouping of residents for recreation periods in an institution has always been difficult. When the custodial attitude was the working philosophy of the institutions, it was felt that the grouping of the retarded for recreation experience was not an important consideration, and therefore, administratively, the easiest, most simple method of scheduling individuals for recreation participation was by cottages. Wilson cottage would go for a bus ride while Roosevelt cottage was on the playground . . . or Spruce cottage would be swimming while Hemlock attended the canteen dance . . . or B–1 might be going for a walk as G–2 heads for the softball diamond. This type of arrangement often leads to wide differences between the participants in their needs, interest, and abilities as they all attempted to function in the same recreational activities.

The personnel hired to administer and lead recreation programs in the institution when it was predominantly custodial in purpose were primarily individuals who were thought to be "good with kids," "good athletes," or "lots of fun." Because the recreation profession is comparatively new, and because recreation for the mentally retarded is an even newer area of concern, recreation directors and leaders for institutional programs generally were not professionally trained people. Often individuals from physical education, cottage or ward personnel, or just people interested in the retarded were brought in to work with the recreation program.

In the late 1950's as new programs were being developed for the mentally retarded at the institution and community levels, a new philosophy—the habilitation philosophy—began to emerge. The primary goal for the mentally retarded, according to habilitation philosophy, was to enable the individual to develop as many skills as possible so that he would be able to function in the community and to interact effectively with, and receive satisfaction from, his environment. The training and development of each individual to the limit of his capacity became of paramount importance. The change in philosophy from custodial care to one of habilitation brought changes in the functions and emphasis of all disciplines working with the retarded.

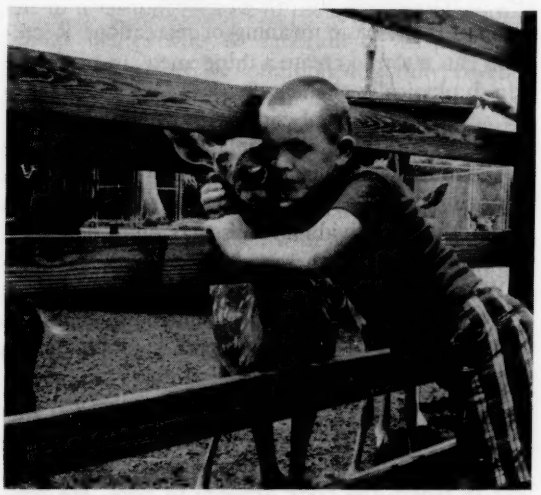
The purpose of recreation for the retarded within the habilitation context has been expressed in varying terminology. In the publication, *Recreation and Physical Activity for the Mentally Retarded,*[1] it

states, "The basic aim of the overall program is to cultivate varied capacities so that the individual is always progressing toward greater degrees of social independence, physical well-being, emotional stability and intellectual advancement." Elliott Avedon [2] talks in terms of, "The plus factors in recreation can be put to work to help prevent many types of physiological and psychological impairment in retarded children. These plus factors can also contribute to a successful economic and social adjustment."

In essence, these two statements express the general opinion among professional recreators today who see the aim of recreation for the retarded to be the development of the individual socially, emotionally, physically, and intellectually through the use of recreative experiences.

Philosophically and operationally, this is quite diverse from viewing recreation as a time filler or to give ward personnel a rest or break. When recreation programs are designed to accomplish anything less than the previously stated aims, it is the individual with retarded mental development who inevitably suffers.

In looking at the institutional recreation programs of today, there are no clear-cut definitive lines which can lead us to a generalization. On the contrary, there seems to be a great stratification in programs, ranging in a few places from the situation described by Mrs. Shriver all the way along the continuum to programs which have a strong developmental and educational orientation. However, for the most part, programs nationwide tend to fall between these two poles.



Breathes there a child who doesn't love an animal?
Photo courtesy of Sunland Training Center, Marianna, Florida.

Generally, there are several trends which can be seen emerging in institutional recreation programs. First, the number of professionally trained recreators being employed in administrative and leadership capacities is increasing. Many of these individuals have special training in mental retardation as well as recreation and the number holding Master's degrees is growing. Second, programs are being offered for all age groups and all levels of retardation. No longer do we see programs geared to just the older, higher functioning resident.

A third trend, is a movement away from "mass diversional activities" toward smaller group activities. The lack of personnel still necessitates working with residents in groups, however, now instead of having one leader to 40 or 50 residents, it is not an uncommon sight to spot one leader with 15 residents. A fourth trend is toward more diversified recreation programs for the mentally retarded. Programs today are offering activities in all areas such as arts and crafts, music, dance, drama, storytelling, sports and athletics, and outdoor activities. Moreover schedules now include tournaments, playdays, and camping experiences as well as community oriented outings. Some programs even allow for unstructured, free participation during the residents' leisure as well as scheduled activities. The diversification in programing can also be seen in the fact that many recreation departments now provide for a wide range of skill levels in many of the activities that are offered. There are often beginning, intermediate, and advanced groupings in different activities, such as swimming. In some situations, the more advanced residents are used to assist in the activities of younger or less skilled residents.

The direction, methods, and philosophy of recreation for the mentally retarded are changing daily. The surface of this growing, challenging field of endeavor has only begun to be scratched. It should not be overlooked, however, that although advances have been made in providing recreation for the mentally retarded, there still remains much work to be done.

References

(1) American Association for Health, Physical Education, and Recreation. *Recreation and Physical Education for the Mentally Retarded,* 1201 Sixteenth St., N.W., Washington, D.C. 1966.

(2) Avedon, E. N. *Recreation and Mental Retardation.* U.S. Department of Health, Education, and Welfare, Arlington, Va., 1966.

RECREATION
Role in a Rehab Center

Wallace Lynch

Fifteen recreators plus clerical staff are employed by the Activities Department, Woodrow Wilson Rehabilitation Center, Fishersville, Virginia. One half of these recreators are college trained professionals, with two having Master's degrees. The department operates 7 days a week, from 8 a.m. to 11 p.m. We have approximately 500 students with ages ranging from 15 to 70 years.

A multidisciplinary approach is undertaken at the center. This approach assumes many aliases; around the Atlanta area, they talk about the conjoint approach; in Texas, the President talked about the confluent approach; in West Virginia, I have heard it called the "shotgun" approach. No matter what verbiage we use, it is the coming together of many disciplines to bring about a change in a common problem. In our case the problem is facilitating the rehabilitation of a client.

Each discipline utilizes tools unique to its profession. The medical people have their "ditty bag," the counselors have their directive and nondirective techniques, the evaluators have their puzzles, the instructors have their opaques and overheads, and the recreators have a wonderful game of drop the handkerchief.

It is generally accepted that recreational activities are the recreators' strongest tools. These tools have definite advantages because they can be used flexibly in an informal atmosphere. This setting usually finds the client very relaxed and with few inhibitions. He does not equate the setting with a forced learning situation, thus the lesson being taught is more enjoyable. The recreator sees the recreational activity as a means to an end, while the client views the activity as an end in itself; for him it is fun and he is receiving immediate self-satisfaction. The goal of the recreator and the client may be the same in that they seek pure enjoyment, but usually in a rehabilitation setting there are additional goals.

The recreator may be looking for organic efficiency, skill in performance, social concepts, educating the taste for new outlets and appreciation of leisure time activities.

Every recreator would like to feel that leisure time and creativity are synonymous.

The rehabilitation goal is to assist the maximum number of disabled persons to become self-sufficient, to restore the handicapped person to his greatest physical, mental, and emotional potential. We believe each handicapped individual has the right to do what he can for himself. Physical, vocational, and medical services are important, but they are not enough. A creative activities program is the catalyst that interacts with these vital services to recreate, to rehabilitate the whole person.

What is the basic meaning of recreation? Recreation can mean to create a thing anew, to restore or refresh physically or mentally. Rehabilitation is also the act of restoring physically and mentally. *Thus* recreation and rehabilitation have the same goal: To restore—what better way than rehabilitation through creative activities? Since we have activities to restore the individual to his maximum potential, we deem this to be therapeutic.

We mentioned that recreators are concerned about organic efficiency; the client may feel this in terms of his body image concept. Paul Shilder, a psychologist, finds the concept of the body image an important factor in adjustment to physical disability. To Shilder, this image means the picture of the body as it is formed in the mind: that is, the way in which the body appears to itself. He considers the awareness of one's body to be the most

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Mr. Lynch is Supervisor, Activities Department, Woodrow Wilson Rehabilitation Center. *The paper presented here is based on remarks Mr. Lynch made at a conference entitled "Therapeutic Recreation and Adapted Physical Education Within Rehabilitation." The conference was held in February 1971 in Hot Springs, Ark.*

immediate and basic fact of mental life and to involve quite different processes from those experienced in one's awareness of the outer world.

Let's put this into terms pertinent to a recreator using a specific example. The paraplegic is suddenly called upon to modify his body image, his concepts of himself and his relationship to people and to his work in accordance with the nature and extent of his disability. The insult of his body image may have implications for the paraplegic that are more crippling to his total functioning as a person than the disability itself.

We see the tool of recreation being used here in an exploratory process. The recreator has a chance to expose his client to activities that have a high chance of success, thus building on what ability he has left and not what is lost. The client needs the opportunity to try all types of leisure-time pursuits—he not only needs to have positive reinforcement but he also must be able to realize his own limitations in activities. This program needs a one-to-one ratio.

After the client receives a number of successes in various activities, the client's self-esteem and body image are improved. Therefore, we advocate that recreational activities can be a tool in the conjoint approach in the rehabilitation process.

How can recreation be a force in socialization? Self-socialization is the process of bringing about the active participation of the disabled in readjustment to the community. Social rehabilitation seeks to readapt the reeducated client to daily life as he will find it outside the center and to overcome the fears, anxieties, and inhibitions stemming from his handicap. It will take time for the rehabilitated client to accustom himself to the company of normal human beings who are ignorant of his problems. He must, therefore, be conditioned morally, psychologically, and physically for his contacts with the outside world. For all these actions he must master his fear of disturbing other people or spoiling their pleasure and become accustomed to the curiosity, questions, and comments which his disability is bound to excite. A person with a disability is sometimes self-conscious when around others who do not have an apparent disability. This feeling is especially strong in the individual who has not adjusted to his condition.

In considering socialization for a person who has only recently been disabled, we feel a group approach is best. If the disabled participants are, initially, among their own peer group, this type of climate seems to reduce their self-consciousness.

We have found archery, riflery, camping, excursions, fireside chats, toastmaster's meetings to be excellent activities for group participation. These are activities which are continued over many sessions in a community setting.

Let's take a closer look at some of the programs. Archers in the winter time in our area move to the indoor range. Leagues of a 3-month duration are organized. In this time segment our clients, wheelchair and walkers, become acquainted with members of the Augusta Archers as well as familiar with archery activities. This knowledge is transferable to a hometown situation.

Fireside chats and toastmasters' clubs are similar experiences, with the added diversion of the clients' getting to eat out.

According to physical medicine authorities, and in keeping with the idea of working with the total person, the importance of a psychological lift cannot be minimized. There is no substitute for a complete recovery, but there is no denying that improvement, no matter how minor, which can be recognized by the participant, might possibly provide the motivation to make the individual strive harder to attain his goal. To the participant in the mentioned program, the ability to do something that he had done prior to his injury helps give him the feeling of being "normal." The feeling of satisfaction resulting from his accomplishment might possibly bring about an improved attitude towards his condition. Unless the disabled person has adjusted to his condition, he is likely to live within himself. A wide variety of activities, which are designed to cause him to project his thoughts beyond his present condition, are usually a help in his rehabilitation. ■

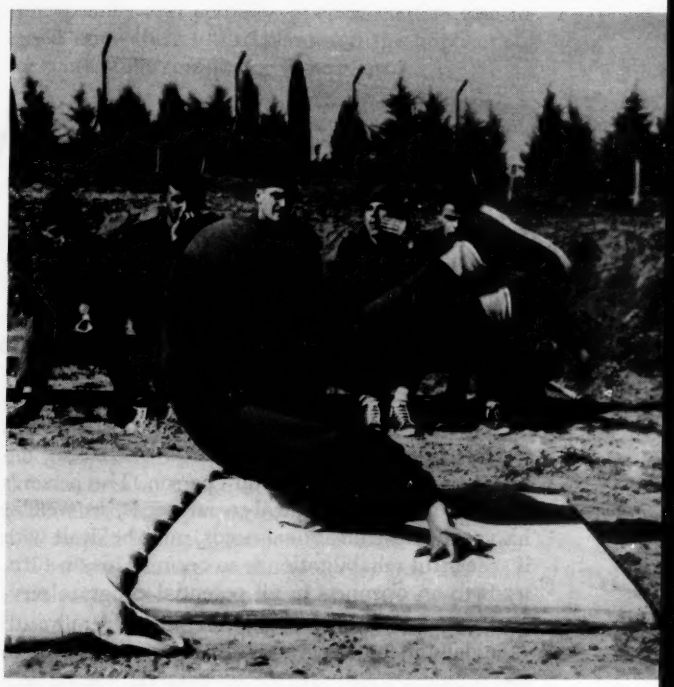
Wheelchair Robin Hoods sharpen up their eyes as they zero in on bull's-eye.

ORANGE PICKING IN ISRAEL

An SRS-supported project in Israel sought to investigate ways of rehabilitating mentally handicapped adolescents for employment in agriculture and related industrial occupations. The project directors established groups who functioned together as separate entities and developed a sense of belonging. They worked together for 8 hours a day, 5½ days a week.

The groups progressed to their final destination—work outside the institutions—through three stages. In the first, the clients developed better muscular control as well as esprit de corps through an intensive program of physical education. The group cohesiveness was further developed in the next stage where the clients established and developed group projects with a clearly definable goal—for example, the plotting, planting, and caring for a rose garden. Finally, the clients were moved out in groups to work in the surrounding citrus groves.

The following are physical education implications drawn from the project's first phase and printed in the *Research and Demonstrations Brief* "Work and the Need to Belong." A fuller description of the project may be read in *Rehabilitation Record,* September-October 1968, page 13.



• The project did not regard physical education as an end in itself, but as a means to an end. Analysis of the agricultural work to be done by the trainees showed the need for fine-finger movements in pruning and picking fruit, an ability to climb ladders and maintain balance on a high ladder, and the strength to carry a sack of fruit from the trees to the crates. Exercises designed to develop these skills were incorporated into the physical education program.

• At the beginning of training, retardates were afraid of physical exercise and of using objects and machines. However, the positive approach of the instructor and the success achieved with an increasing range of physical education tasks enabled them to overcome their fears, gain self-confidence, and perform with less hesitation and more proficiency.

• Physical education proved to be effective if given in sessions of about 4 hours duration, and if based on variety, multiple participation, flexibility, and extensive use of sports.

• Contrary to popular belief, the severe retardate is capable of getting bored. Also, he has difficulty in concentrating. A physical education program for him needs variety, such as several short periods of calisthenic exercises, a number of different forms of equipment, and the mixing of calisthenics, hiking, and ball games.

• Little time should be spent on the abstractions of exercise. The best way is to simply present the program as a natural activity in which all trainees are expected to take part, and emphasize its pleasant aspects. A sense of humor on the part of the instructor can help to convert the physical exertion and training into an enjoyable experience.

• Physical activities have to be adapted to the limitations of the severe retardate. This requires flexibility in the planning and provision of instruction. If the instructor is aware of the basic principles involved in exercise and sport and can learn to dispense with intellectual "frills," he will find many ways of providing a beneficial physical program for severe retardates.

• At the beginning of the project, most of the trainees were in poor physical shape because of lack of exercise. Many had low stamina, flabby muscles, and bad posture. Some could not even walk properly. After 6 months in the physical training program, most of them were able to walk 2 miles to the orange groves, work from 6 to 8 hours in the open air, and walk back to the institution.

Survival Camping With Problem Youth

Thomas R. Collingwood, Ph.D.

With the ever broadening scope of rehabilitation services to problem youth comes an increasing demand to deal with the "total" person. The person's physical and psychological-social needs, as well as his vocational-educational needs, must be dealt with if successful rehabilitation is to occur. This, in turn, leads to an openness in all potential program services aimed at the rehabilitation of problem youth (the delinquent, drug abuser, dropout) and potential problem youth (the disadvantaged, the turned-off).

This need led to a cooperative effort by the Arkansas Rehabilitation Service, Aldersgate Methodist Camp of Little Rock, and the Arkansas Rehabilitation Research and Training Center to develop an innovative client service program that had the potential to positively affect the "total" person. The end result was the development and implementation of "Operation Survival," a rugged, 3-week camping program designed as both a client service and as a demonstration project for problem youth in Arkansas.

Operation Survival's goal was to develop more positive behaviors and attitudes in all areas of functioning, including the physical, intellectual, interpersonal, and emotional areas. We felt that a therapeutic camping program with a strong physical base could meet this concern.

The basic premise underlying the program and inherent within the intensive, physical, 24-hour camping and survival experience is that the therapeutic potentials of such an experience could have a potent impact upon the rehabilitation of problem youth. In turn, the camping program is built to function: 1) as a systematic program that demands increasing increments of performance and produces, by design, increased levels of successful accomplishments; 2) as a functional program in which the experiences, demands, and reinforcements placed upon the clients are relevant to their day-to-day survival; 3) as an inexpensive program that uses existing community resources and functional, nonprofessionals as staff; and 4) as an integrated program within a client's total rehabilitation program. Within this perspective, the camping program is viewed as an initial therapeutic service to prepare clients and get them "in shape" for the vocational rehabilitation process in terms of more effective and positive behaviors and attitudes.

Clients, Staff, Resources

Twenty-one boys between the ages of 15–18 started the program. One boy didn't complete the program for medical reasons and one quit. The remaining 19 completed the 3-week program. Three of them were from one of the training schools in Arkansas, 10 were from the Arkansas Rehabilitation Service First Offender Program, and six were from a large rehabilitation facility. All 19 were rehabilitation clients and were volunteers. They were encouraged to enter the program by their rehabilitation counselors.

Aldersgate Methodist Camp (a resident camp in the Little Rock area) provided facilities for the initial training stage. Several items of field equipment were borrowed from the National Guard. The Ozark National Forest served as the area for the backpacking and survival portion of the program. Staff con-

Dr. Collingwood is a research associate at the Arkansas Rehabilitation Research and Training Center, Hot Springs, Arkansas. He is coordinator of the program described here.

sisted of one coordinator (myself) from the Research and Training Center and four camp counselors from the resident camp.

Program Overview

The program lasted 3 weeks. Campers and staff formed six-man teams with one counselor and five boys composing a functional unit.

During the first 8 days at the resident camp, the boys learned basic survival and camping skills and underwent physical conditioning. The latter consisted of running, calisthenics, and hiking. Skill training in outdoor survival encompassed personal and camp hygiene, fire building, food and water procurement, cooking, shelter making, hiking and backpacking, orienteering (mapping, reading a compass, etc.), first aid, and general campcraft.

Following basic training, a 9-day backpacking expedition took the clients through the Ozark Mountains. Everything needed for survival was carried on their backs. A portion of their food had to be secured from the land (snakes, polk salad, fish, crayfish, burdock plants, wild berries, sassafrass roots, and water). Toward the end of the 9 days, pairs of participants were sent on a 24-hour survival session where they secured their own shelter, food, and fire.

After returning to the resident camp, the participants spent 2 days in group counseling and recreation. The major thrust of the counseling was to consolidate the gains from the physical experience, both conceptually and verbally. Specific content also focused upon their future plans and the implications for successfully completing those plans.

Program Considerations

At all stages, the program was run systematically. During basic training, skills were taught at a group and individual level so that competency could be obtained regardless of initial level. Skills and physical tasks were taught and attempted from the least difficult to most difficult. From the basic training to the end of the backpacking phases, the participants earned increasing responsibility and decision making functions. Every day, especially during the basic training phase, certain tasks and goals had to be met. Self discipline was a prime goal. Rewards, such as coke breaks, smoke breaks, and free time, were systematically employed or withdrawn to increase skill acquisition and cooperative work effort.

The key reinforcement, however, was the functional aspect of every part of the program. Thus, from the very beginning, in resident camp, they had to build their own shelter and cook their own food. This placed a very real demand on them to learn the skills and to cooperate with each other in order to meet day-to-day necessity needs. The boy who quit, for example, was not able to meet these functional demands. He refused to help get meals, and the other campers would not let him eat without his contributing to the process.

Survival Camping means exactly that. Here "Survivors" construct a table.

This functional operation was most pronounced during the backpacking phase when the meeting of everyday needs and day-to-day survival was dependent upon individual and group performance. How well an individual got into shape during the basic training phase affected his backpacking pace and, in turn, his group's pace. How well an individual learned to read the stars, compass, and maps could determine whether he or his group got lost. How well an individual learned to find food and water directly affected his own and his group's survival. Cooperation, responsibility, leadership and "followership" were functionally demanded 24 hours a day. If not attained, one went without shelter, fire, food, and water.

Intense functional program aspects, especially during the backpacking phase, were further exemplified when the participants had to learn to perform while fatigued, lonely, scared, and at times uncertain as to what was going to happen. These situations were in daily evidence in such pursuits as finding food and water, climbing mountains, and orienteering (not getting lost). There were some dangerous challenges, as well. Encounters with poisonous snakes were a daily occurrence and there were black bears in the area. This, coupled with the new and unfamiliar surroundings, served to make the process functionally confronting for the participants.

When the boys first entered the camp and as a result of not knowing what to expect, they were somewhat apprehensive. As the basic training phase got underway, they loosened up and became more confident. Most of the boys were in poor physical shape and had never camped before. Consequently, much effort had to be put forth on basic campcraft, physical training, and hiking. It took them a few days to learn to work together. But since they were in a functional situation where they were forced to work as a unit, they were working as a team by the end of the basic training week. Once they had gained a level of competency and knowledge to survive in the woods and work with each other, they were bussed up to the Ozark National Forest and mountains for the backpacking phase of the program.

A Long Trail To Blaze

The first few days in the Ozarks were fairly hectic. Originally we planned to cover approximately 100 miles within a week; however, it became clear the boys were not physically able to accomplish that. At the same time, the planned water sources (intermitent streams) were dried up and securing water became a real problem. One of the boys who went up a draw to find some water got lost. When we found him we discovered he hadn't found any water but had found some old cans of beer a deer hunter had left. His thirst, at least, had been satisfied!

The lack of water necessitated an alternate plan and the boys helped decide upon one. They planned to blaze a trail down an intermittent stream called the Illinois Bayou. Each group set out on its own. Along the bayou there was a steady supply of food and water (crayfish, fish, polk salad and snakes). A couple of the boys almost were bit by copperheads and cottonmouths; however, not only did they learn to be careful but they became adept at skinning and eating them. A few of the boys, at first, were leary at night because of the snakes and of the black bears in the vicinity. One boy woke me in the middle of the night claiming there were bears in the camp. Although none were sighted, he persisted and finally I told him to build a fire. An hour later, there was a campfire as big as a house that could have turned into a forest fire! No one worried about bears after that.

On Their Own

Toward the end of the backpacking portion of the project, pairs of campers were sent out to survive on their own for 24 hours. Some of the boys were very ingenious in the shelters they built, but one pair was the most creative. With map and compass they struck out across country and reached a small town 15 miles away. Their survival meals consisted of food and soda pop while the others had greens and sassafras tea, if they were lucky.

All of the boys demonstrated ingenuity in many ways. Most were heavy smokers prior to the program, and they craved tobacco so badly that many would roll dried leaves and dried grass into cigarettes made with tissue paper. In all respects, it could be said the boys learned to survive in the camping situation.

A Time For Assessment

The last 2 days, back at the resident camp, were spent in group counseling and discussion. The boys voiced a real pride in what they had accomplished. A major goal that many of them had developed was "just to make it," and they all did. They all were

confronted with the fact that they had accomplished a lot in the program and were now better able to accomplish something in their life situation back home. Further plans to follow through or in terms of education or vocational training were discussed.

In viewing the participants' progress through the entire program, there appeared to be two basic types of boys. The majority appeared at the start to have many inadequacies and little strengths. It seemed that they turned to drugs or antisocial behavior as a self defeating means to overcome these inadequacies and belong to a group. The camping program served as an intense success experience, "filling" them with adequacies and accomplishments that increased their self-confidence and self-esteem. A good example was Brian. Prior to the program, he was so skinny and weak, he was afraid to try anything for fear of failing. Following the program he would tense his biceps and claim a two-inch gain (he actually lost weight as everybody did due to the diet!). But the important thing was that he thought he had!

(Above) A welcomed break in the day's march. Although feet may be sore, spirits soar. (Below) Crawdads for a stew? You bet. And what a flavor!

There were other boys who had many adequacies and strengths, but they would use these resources for whatever end they wanted to achieve and tended to make a game of everything. These boys learned to cooperate and act more responsibly as time went on. Especially in the Ozarks! The program offered them an alternative direction in which to use their resources. A good example is Ralph. Prior to the program he had been a floater, bouncing from one thing to another. After the program he worked the rest of the summer as a camp counselor and functioned effectively, and he is currently in school.

Several assessment measures used indicated that the participants made significant and positive gains in physical fitness, body image, self-concept, and self-acceptance (sound body, sound mind). Behavioral ratings by the participants' counselors and parents indicated significant improvement in physical, intellectual, emotional, and interpersonal behavior. Evaluations by both the participants and their rehabilitation counselors rated the camp program as having a significant effect on their rehabilitation and personal factors affecting rehabilitation.

The participants' status 3 months following the camping program also bears out the program's positive effect. Prior to the camping program, three of the boys were in vocational training, one was in school, none had a job, three were in training school, and 12 were on probation, doing nothing. Three months following the camp program, eight were in vocational training, seven in school, two on jobs, none in the training school, and two unaccounted for.

The sources of gain for the participants were derived from the functional and systematic process. At one level, the survival camping process functioned as a vehicle to provide a learning and therapeutic success experience. The participants were able to leave the program not only with a sense of accomplishment, but with more effective behavior and attitudes relevant to their rehabilitation. Such an approach to problem youth warrants consideration as a key therapeutic program to be employed as an integrated portion of a total rehabilitation program, perhaps as a first step service prior to educational and/or vocational training. ■

The wheelchair athlete's stature has grown greatly in competitive sports. Recognition came through the tremendous growth in wheelchair sports at regional, national, and international levels. The past decade brought an enormous expansion in the number of competitors plus an introduction of many new events for both men and women.

Athletes are able to test their talent in specific events on the regional circuit. Once they have become reasonably proficient, they can pit their skills against the finest athletes from across the nation at the annual National Games. From the competitor's performing at Nationals, a team is selected to represent the U.S. in world competition: annually in England, biennially in the Pan Am Games, and every 4th year at the Paralympics in the country that is hosting the regular Summer Olympics.

The National Wheelchair Athletic Association (NWAA) regulates all sporting events with the exception of basketball and bowling. The NWAA hosts the National Games every June in New York City, and the National Wheelchair Athletic Committee then selects the top athletes to represent the country.

The National Wheelchair Basketball Association sets guidelines for all conference games and sponsors the National Tournament in March of each year to determine the national championship team. There are 11 conferences and 64 teams plus independent teams from coast to coast.

Mr. Crase is National Sports Coordinator, Paralyzed Veterans of America.

The American Wheelchair Bowling Association enforces the American Bowling Congress rules for male bowlers, and they hold their National rolloffs annually in the summer. This tourney is a handicap and scratch bowling meet pitting the top male bowlers from all around the country. The female bowlers are in the process of forming the Women's wheelchair bowling association.

Also, during the year, there are numerous table tennis tourneys played in all sectors of the country, governed by the United States Table Tennis Association. Weightlifting events take place throughout the year, particularly in the Pennsylvania area where some of our finest wheelchair weightlifting athletes train.

In both the men's and women's divisions all competitors are classified by a team of physicians to insure fair competition in all events for all degrees of disability. The classification systems are described below:

U.S.A. Classification

IA. Incomplete quadriplegic who has involvement of both hands, weakness of triceps, and a generalized weakness throughout the trunk and lower extremities.

IB. Incomplete quadriplegic who has some upper extremity involvement but less than IA but with trunk muscles and lower extremities similar to that of IA.

I. Complete spinal paraplegia originating at T–9 or above or comparable disability where there is a total loss of muscular function originating at T–9 or above.

II. Complete spinal paraplegia at T–10 through L–2 inclusive or comparable disability where there is a significant loss of muscular function of hips and thighs.

III. All other disabilities below L–2.

International Classification

IA. All cervicals without triceps or very weak triceps (to power of 3/5).

IB. Cervicals who have good triceps and the 1st dorsal segment (power 4/5).

II. Below T–1 to T–5.

III. Below T–5 to T–10.

IV. Below T–10 to L–3.

V. Muscle function in lower extremities, 10 to 29 points maximum.

VI. Muscle function in lower extremities, 30–50 (paraplegics) 30–45 (polios).

This system must be adhered to rigidly and to the letter to maintain equitable competition from the very beginning of an athlete's career.

The major sporting events are archery, bowling, swimming, track, field events, weightlifting, table tennis, and basketball. On the international scene, club throwing, lawn bowling, pistol shooting, billiards, and fencing add to the list.

Wheelchair archery has five championship rounds for men and women. Wheelchair athletes are allowed to compete in regular competition if they qualify under the National Archery Association rules. For wheelchair competition, the rounds are:

F.I.T.A.—36 arrows each at 90–70–50–30 meters for men; 36 arrows each at 70–60–50–30 meters for women

Potomac—24 arrows each at 80–70–60 yards for men and women

American—30 arrows each at 60–50–40 yards for men and women

Columbia—24 arrows each at 50–40–30 yards for men and women

Novice—24 arrows each at 40–30–20 yards for men and women

Dartchery is also part of the archery game. Competitors, meeting in pairs, shoot at a dart archery target at 15 yards.

Bowling in regional and national games is done on a classified basis, but in the AWBA tournament and in the many leagues formed around the country, the game is rolled in open competition with scratch and handicap series. This sport also can be played with able-bodied bowlers.

Stick bowling for quadriplegics with lack of sufficient grip is encouraged. After placing the ball near the foul line, a handled stick on small casters is used to push the ball down the lane.

Field events consist of the distance javelin, precision javelin, discus, shot put, and internationally, the club throw. All equipment used for male and female competition is the official ladies international discus, javelin, and shot put (for women, the 3 kilo shot is permitted). All throws are made from the shot put circle with the inner edge forming the true arc. The sector to throw to is an angle of 65 degrees from the center of the circle. The wheelchair has to be firmly set in the arc with all four

Weight Training Builds Self-Confidence

The Vocational Evaluation and Training Center (Shreveport, La.) finds that weight lifting is not only good physical activity, but also improves stamina and muscle stature which in turn can help build self-confidence and physical maturity. Mentally retarded males enrolled in a work adjustment training program followed a weight lifting regimen while in physical education classes and seemed to benefit greatly. One trainee serves as group leader and another keeps progress records for each individual. An instructor functions as observer and works closely with beginners. Groups are designated heavy-, medium- and light-weights, thus fostering equal competition within each group.

—Focus on Facilities
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wheels on the ground and a holder can be used to maintain stability for the wheelchair but not the athlete. The athlete is not allowed to raise up off the cushion in any event. Three throws are permitted.

The precision javelin target consists of eight concentric rings of 8-inch width each, flush to the ground. The center ring counts 16 points. Each ring away from it counts 2 points less than the previous ring. The competitor throws six times at a distance of 33 feet (male) and 23 feet (female) from the line to the center of the middle ring. The best five scores count.

Track events are a demonstration of speed, dexterity, and maneuverability. The wheelchair slalom run is a race against time on a course defined by flags (gates). The obstacles are steep ramps, 3- to 8-inch step-up and down platforms, at a minimum of 80 meters. The wheelchair slalom is similar to the ski slalom, with the exception that the course is laid out on a flat, hard surface.

The dashes are run on a six-lane, hard surface, straight away track for the 40-, 60-, and 100-yard dashes. The 220 and 440 yard relays are run by 4 members to a team, and instead of carrying and passing a baton, the competitor merely slaps the forearm of the succeeding runner. The mile and half mile runs are made on an oval, ¼ mile track in single competition. The relay teams can compete in the 880 and mile 4-man relays. The female competitor competes in all the track events with the exception of the distance runs.

Table tennis is another event that can be played against able-bodied competition. Even the high level quadriplegics (by securing the paddle to their hands with tape or some other method) can play the game with a high degree of skill. Many of our finest table tennis players are high level quadriplegics. Singles competition is played on the national level and doubles competition is added in the international games.

Swimming is a very excellent conditioning sport demanding a tremendous amount of stamina and perserverance. The breast, front free, and back strokes are swum at distances of 25 meters for I–A, and I–B, and 50 meters for the remaining classes. Internationally, the 100-meter individual sprint is added along with the relay teams and the individual medley, the latter requiring 25 meters each of the breast, back, and front free stroke. Obviously, this is a very pressing event which requires indepth training. All competitors commence their swims in the water and touch the deck above the water line for negotiating their turns and finishing the heat. Kick during the swim is forbidden unless a competitor swims in the special kicking class with the single amputees and walking paraplegics.

Weightlifting is growing in popularity. Physical and mental conditioning is extraordinary and the lifts are phenomenal. This is a no class event since strict body weight places an athlete in his proper division for bench pressing. The official body weights for the respective divisions are: Featherweight, up to 125 lbs.; lightweight, 125 to 147¼ lbs.; middleweight, 147¼ to 165¼ lbs.; light heavyweight, 165¼ to 187¼ lbs.; heavyweight, 187¼ lbs. and up.

The records indicate that in bench pressing the wheelchair weight lifter is on par with his able-bodied counterpart.

Basketball is the oldest and the most dominating sport event for wheelchair competitors. Even the gals are forming teams for recreational purposes and eventual rival competition. The sport is usually the nucleus of their respective track, field, and swim teams. The National Collegiate Athletic Association rules are adapted appropriately by the NWBA to allow for the wheelchair.

The player is allowed 6 seconds in the free throw area on offense (compared to 3 seconds for regular basketball). The wheelchair is considered part of the player.

To execute a dribble, a player may wheel his chair by two pushes on the wheels (one hand or two hands in either direction) of the chair followed by one or more taps of the ball to the floor, after which he may shoot, pass, or start pushing again. Or, he may wheel his chair and bounce the ball simultaneously just as a player may run and bounce the ball in regular basketball. He may not push more than twice in succession with one hand or two hands in either direction. Taking more than two pushes in succession constitutes a traveling violation, and the ball is awarded to the other team out of bounds.

For a jump ball, each player is seated in his chair at a 45 degree angle to his own basket. Since the chair is considered part of the player, he must not make contact with an opponent or his chair with his hands unless the contact is only with the opponent's hand while it is on the ball and is incidental to an attempt to play the ball.

Javelin throw at the National Games.

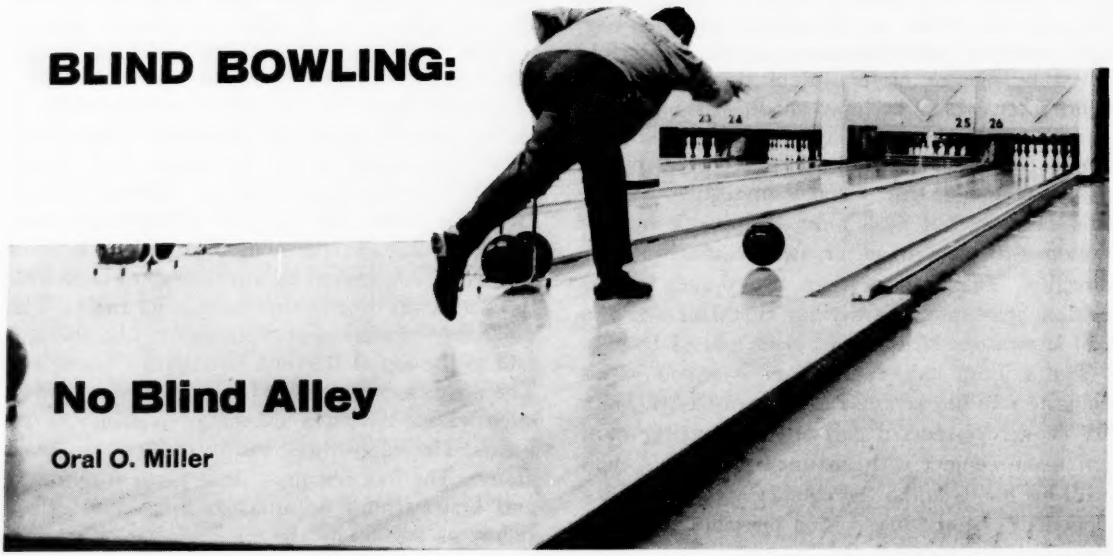
In balancing a team, each classification is given a numerical value or factor. Class I is 1 point; Class II, 2 points; and Class III, 3 points. At no time in a game can a team have players participating with a total value of points greater than 13, nor more than 3 Class III players playing together at the same time. Here again the classification helps keep a fair sports system.

As rules apply to the athlete so must they to his equipment, mainly the wheelchair since many unfair advantages could be contrived to "soup up" the four-wheel sports buggy. The wheelchair's minimum height, from ground to top of the push handles is 32⅞ inches. The maximum height for the seat, from ground to top of the seat rail with the competitor out of the chair, is 21 inches. The minimum measurement from the top of the seat rails to the top of the push handles is 13½ inches. The wheelchair must have four wheels with the two large wheels having a maximum diameter of 24 inches. The small wheels can be either 5- or 8-inch casters. The foot rest must be in place at all times, and a strap must be attached firmly and drawn tightly as possible to the telescope bar or the foot platform, and must be behind the legs at all times. The seat cushion can be up to a maximum of 4 inches and the arm rests can be removed, if desired.

Competitive sports are a tremendous physical challenge, a psychological lift, and a healthy assist to the handicapped. Many top notch athletes were fine able-bodied athletes until some catastrophic accident or disease altered their lives. And yet some of the top competitors were born with or received in childhood a physical impairment which seemingly would prevent them from anything strenuous.

Now, many of these people have adjusted to the new life of a traveling competitive athlete that has enabled them to travel to such places as England, Ireland, Israel, Argentina, Brazil, Hong Kong, Hawaii, Austria, Switzerland, Italy, Greece, France, Japan, Spain, South Africa, Canada, and Jamaica. These developments in sports on the national and international level show that wheelchair-bound individuals can develop as competitive athletes. It further serves to educate the public on the activities of the handicapped. And, of course, it brings a ray of pride to the individual for proving that he could overcome adversity. In these endeavors, sports can become for many a spring board back into society. ■

BLIND BOWLING:



No Blind Alley

Oral O. Miller

The following article first appeared in the April 1971 issue of the *Journal of Health, Physical Education, Recreation.* It is reprinted here with permission.

Since the 1830's and 1840's, when the first schools for educating and training the blind were pioneered in the U.S., it has been realized that there is a need for establishing worthwhile physical education programs to assure that blind students attain even minimal levels of physical development. Many early physical education programs were little more than supervised play periods; perhaps the best thing that can be said about them is that they were conducted according to a schedule!

By the 1890's, many educators of the blind were encouraging, or at least allowing, their students to participate in many physical activities and sports engaged in by sighted students—track and field events, wrestling, swimming, football, gymnastics, and an early form of bowling. During the early 1900's, the Kentucky School for the Blind played a regular football schedule with a number of sighted schools in Louisville. This sport was dropped by the school when passing was introduced to the game and several rules changes concerning line play made it almost impossible for the blind to compete equally against sighted players.

No one knows precisely when bowling programs were first introduced into the schools and sponsored by agencies for the blind. Bowling was enjoyed by students of the Overbrook School for the Blind in Philadelphia as early as 1910. Partially blind bowlers needed no special assistance as they had useful vision, but totally blind participants used a wall to guide them as they delivered the ball.

Some schools conducted bowling activities in gymnasium-like areas which were also used for other activities; some schools and residential facilities built regular bowling lanes as early as the mid-1940's. Almost all of these lanes were equipped with fixed handrails alongside the area in which a bowler takes his steps preparatory to rolling the ball. Totally blind bowlers usually slid one hand along this rail while delivering the ball with the other hand. The rail enabled a blind bowler to aim his ball at the pins, and it also let him know when he had reached the foul line.

Bowling is not the most beneficial of all possible physical activities for the blind; other activities are more strenuous, develop strength and muscle tone better, and require more precise coordination. In

Mr. Miller, president of the American Blind Bowling Association, is a totally blind attorney on the legal staff of the Small Business Administration. A member of ABBA for 10 years, he had never bowled before joining.

school I competed in track and field, wrestling, crew racing, and a modified form of basketball, but I discovered soon after graduating that most of these activities were no longer available to me.

Many blind adults encountered the same situation until groups in the Philadelphia and New York areas decided to do something about it. Many who had bowled while in school wanted to continue after leaving the school environment, so they formed small, informal groups to bowl at nearby commercial lanes.

Since these lanes were not equipped with fixed guide rails, some form of guidance for totally blind bowlers had to be devised; before long, several devices or systems were in use. Some blind bowling groups always bowled on a lane next to a wall which served as a guide; others attached wooden or metal pipe rails to a nearby wall; some used a string stretched between two fixed points on the lanes; still others used a strip of carpeting which totally blind participants could feel with their feet.

Competition between different bowling groups was difficult or inconvenient, since no uniform guidance devices were used. In spite of inconveniences blind bowlers in the Philadelphia area held the first national championship blind bowling tournament in 1948; approximately 80 bowlers from the Philadelphia and New York areas participated.

Participants in early national tournaments realized that if bowling were to be enjoyed properly by a significant number of blind people throughout the U.S., national organizations would have to be formed to publicize and encourage this sport, to conduct an annual national tournament, to set basic rules, and to better standardize equipment—primarily the guidance device.

In 1951 the American Blind Bowling Association (ABBA) was incorporated. Interest in bowling continued to spread among the blind as many charter members of the ABBA publicized it by traveling to neighboring cities and States to assist in the formation of new groups or leagues, which were organized in essentially the same way as leagues for the sighted.

The task of developing a suitable, standardized guidance device was undertaken in the 1950's by Martin Mahler, a blind bowler who also manufactured precision equipment. He wanted to design a helpful guide that would be relatively inexpensive, portable, easily stored, easily erected and taken down, and harmless to the bowling lanes. The rail he developed was made of lightweight, tubular metal which, when assembled, was three feet high and nine feet long. To hold the rail firmly in place without attachments to the floor or to a wall, four ten-pin bowling balls were used as weights in the base of each rail; earlier attempts to use sand bags or buckets of water were discarded.

The ABBA encouraged its member leagues to use the Mahler bowling rail, the sale of which was handled by the American Foundation for the Blind. Mr. Mahler next turned to the task of designing a longer, heavier, more durable though less portable guide rail for national tournaments where portability and ease of handling were not so critical, as rails could be set up and left for the duration of a tournament. After several revisions and improvements the tournament rail used since the early 1960's has been 3 feet high and 15 feet long, extending the entire distance from the foul line to the beginning of the bowling approach.

The 9-foot guide rail originally designed for regular league competition was also redesigned in the early 1960's, strengthened, and extended to 12 feet in length. Portable rails cost approximately $25 and are sold through the American Foundation for the Blind. The heavier, more durable tournament rails belong to the ABBA, are stored in New York during most of the bowling season, and are shipped to and erected on the lanes in time for each tournament.

Each league purchases its own portable rails, which can be easily taken apart and stored in boxes or canvas bags similar to small mail bags. Since portable rails rest on small rubber tips when in use, they are harmless to the floor and may be used in any ten-pin bowling establishment.

How does a blind bowler know which pins he has knocked down or are still standing? This invaluable information is generally furnished by a sighted scorekeeper, although there is an electronic device which conveys this information to the bowler. Most sanctioned ABBA leagues now use sighted scorekeepers as regular team members along with totally blind and partially blind members.

In 1967 the ABBA established a membership class and competition category for sighted bowlers, who

Recreational and Occupational Recommendations For Use By Physicians Counseling Young Patients With Heart Disease. American Heart Association, 44 East 23rd. St., New York, N.Y. 10010. 6 pages.

Although this pamphlet is directed at physicians, it should be of interest to many rehabilitation workers. The pamphlet is a statement by the Ad Hoc Committee on Habilitation of the Young Cardiac of the Council on Rheumatic Fever and Congenital Heart Disease.

A two-page chart lists the various heart conditions (aortic insufficiency, pulmonary stenosis, ventricular septal defect, etc.) and the recreational and occupational restrictions applicable to the condition. Under each restriction (classified as none, mild, moderate, and severe) is a listing of examples of allowable recreational or occupational activity.

Before making an activity-level determination, the physician is cautioned to examine several factors peculiar to each individual. These factors include such things as emotional stress, body size, environment, nature and duration of work, and individual variations.

bowl against one another in the auxiliary category in the national tournament as well as in other events sponsored by ABBA. The creation of this category has improved the morale of our sighted bowlers tremendously. Many of the sighted members are invaluable as bowling coaches to the blind; to many, blind bowling is a totally foreign series of movements the first time they try it. How well a blind person eventually bowls depends upon a variety of factors—natural physical ability, age, amount of practice, prior bowling or athletic experience, and quality and availability of coaches (professionals do not always make the best coaches!). Bowling averages among the blind range from the teens to the 170's.

From its modest origins in 1948, the ABBA has grown into an organization with almost 3,000 members and with over 100 sanctioned leagues in the U.S. and Canada. National tournaments attract more than 1,000 bowlers annually and are the largest gatherings of the blind in the U.S. Every ABBA member who has bowled the requisite number of sanctioned games in league competition during a season is eligible to compete in the national tournament at the end of that season.

Although tournament rules may change slightly from year to year, competition is usually divided into categories based on sex, bowling average (100 is the dividing line), and visual status (totally or partially blind).* Each member league is free to conduct its own fund-raising activities to pay tournament entry fees of its members; in many cases individual bowlers pay their own fees and other expenses without any assistance from their leagues. The 1972 national tournament will be held in Philadelphia, home of the first national tourney.

The ABBA encourages and sponsors bowling in various ways throughout the season by giving awards to bowlers who match or exceed published target scores and by presenting other awards to bowlers who attain the highest scores in their categories throughout the entire season. The Association also conducts a National Mail-o-graphic Tournament in which participants' scores bowled in league competition during a designated week are mailed to the ABBA Tournament Director and matched against scores of other participants.

All cash prizes and medals or trophies are paid for from entry fees paid by the bowlers themselves. The policy of the Association is to use available prize money for many small prizes rather than having a few large prizes. This distribution system increases interest. A handicap added to each score makes it possible for low average bowlers to win prizes in competition with bowlers who have higher averages.

Throughout the season, ABBA also publishes in Braille and inkprint a magazine that includes announcements, tournament information and results, bowling tips, and high scores bowled. The Association encourages the formation of area blind bowling associations which themselves conduct annual tournaments sanctioned by ABBA; five such area associations have been formed in the U.S.

Teaching the blind to bowl is relatively easy and therefore should not be shunned by the sighted. Better blind bowlers use essentially the same motions as those used by sighted bowlers with the exception that the hand which is not holding the ball slides along the guide rail or is used in some other way in relation to the rail.

Since neither arm is free for purposes of balance, the bowler must be careful not to exaggerate the

*Partial or legal blindness is defined as 20/200 with correction in the better eye or a field limitation of 20 degrees or less. Total blindness is defined as having no useful vision.

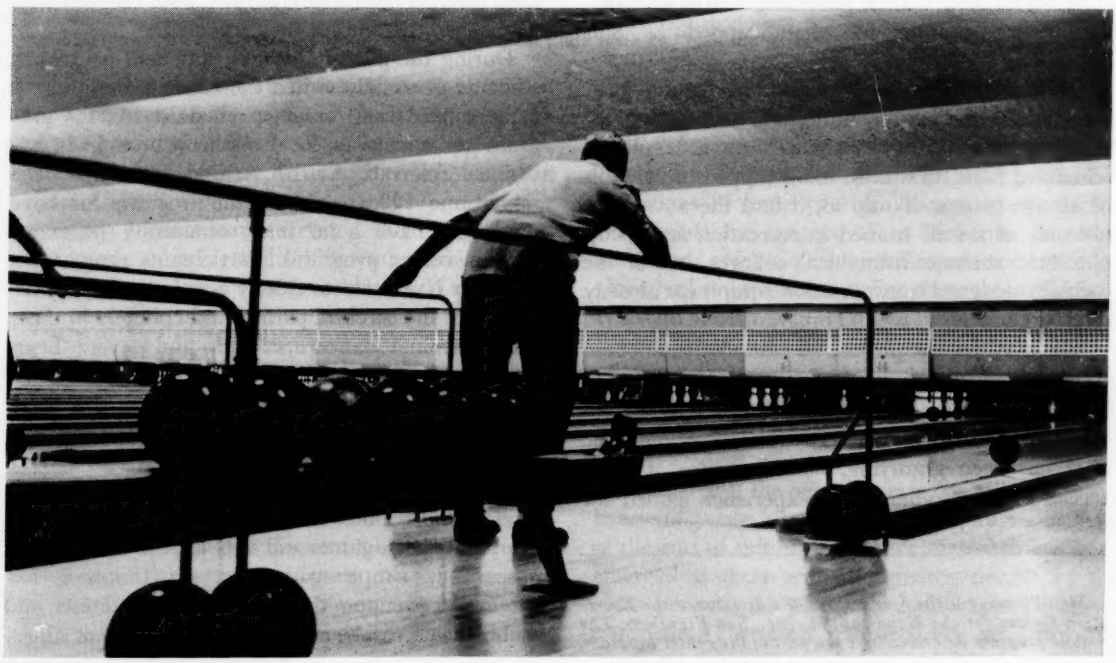
swing of the arm and hand holding the ball. Every movement should be described and explained thoroughly and then be demonstrated in such a way that the bowler can feel the movements or combination of movements. Words which are meaningful to the sighted instructor because of familiar visual associations or references are often meaningless to a blind person, especially to one who has never had sight. A simple and seemingly clear statement such as "Step forward on your left foot" may be of limited value to a blind student if he does not know how long the step should be or whether he should step flat-footed or on the balls of his feet.

Blind bowlers should be urged to use as nearly as possible the general movements of sighted bowlers, making allowances for use of a guide rail if the bowler needs it; we are pragmatic enough to concede that some bowlers may bowl better with a somewhat unorthodox style! Use the style that works best for the individual bowler after he has sincerely tried the orthodox one. Some bowlers do better by rolling their balls from a stationary position than from the usual moving approach.

The rapidly increasing popularity of bowling is at least part of the proof of the pudding that reflects some of the physical and recreational values of the activity for the blind. As a physical exercise, bowling is stimulating but not strenuous, and in many cases is the only nonessential exercise engaged in by the blind. It can be enjoyed by all age groups and both sexes. The use of a handicap stimulates a desirable degree of competitive spirit which could be snuffed out among the lower bowlers otherwise. As a recreational activity it is one of the best and one of the few physical activities in which the blind can participate on an almost equal footing with sighted friends and relatives.

The sense of achievement experienced by a blind bowler who has just rolled an impressive score is invaluable in building or restoring the confidence which many blind people lack in areas usually considered the domain of the sighted. Bowling also shows the blind, especially the newly blinded, that they can excel in spite of their visual limitation; this restored knowledge frequently carries over into their occupational and social behavior patterns. While I do not favor using maudlin examples to prove a point, I know of three newly blinded people who freely say that "Bowling saved me." Of course, bowling also has its strictly recreational value because it is just plain fun. Almost everyone wants to do well in whatever he does, but in the case of bowling, it is almost as important for the blind just to decide to bowl in the first place. ■

Blind bowlers can become very proficient. Note portable guide rail that is easily removable (on casters) and weighted down with bowling balls.



A Mobile Service for the Homebound

Janet Pomeroy

A WHITE SPORTS VAN BUS labeled *Homebound Recreation for the Handicapped* has become a familiar and welcome sight in neighborhoods all over San Francisco.

Each day the bus leaves the Recreation Center for the Handicapped filled with enthusiastic and talented recreation specialists, field work students, and volunteers. They are off to make their daily rounds, to bring recreation and companionship into the lives of many severely handicapped and mentally retarded who are confined to their homes. Homebound recreation, a first for the center, has added a new dimension of service to a program now entering its 20th year of providing year-round recreation for the severely handicapped of San Francisco.

In October of 1970, with funding from a local foundation, the center undertook a 2-year pilot program [1, 2] to bring its services, on a regularly-scheduled basis, to shut-in handicapped individuals of all age groups. To do so, it had the advantage not only of a staff trained in recreation leadership plus field students from local colleges, but of the specially-designed transportation equipment already used for the center's regular programs.

The need for the project was amply documented by a growing waiting list of severely handicapped (159 at the time) and by increasing referrals from other agencies. Its degree of success, after only one year has been gratifying, both in terms of those served and in training and experience gained for those who served in it. A recent additional grant attests to earlier accomplishments.

The central goal is to extend the expertise gained by the Recreation Center from 20 years of service within its own facilities to those who, for physical or psychological reasons or both, are unable to come to the center. A vital corrollary is to extend such knowledge and expertise, *within the home,* to parents, foster parents, caretakers, homemakers, nurses' aides, volunteers, etc. To the extent possible, a further goal is to integrate the handicapped into existing community recreation programs and, if this is not feasible, to increase their capacity to spend their unsupervised time fruitfully, both for their own benefit and for that of their associates.

During the planning stages, staff and field work students personally visited the entire waiting list to explore needs and arrange schedules. As the program got underway, local publicity brought in additional referrals. At this writing, 200 have been served and 129 are now in the program. Six have died; 30 have gone into community programs and/or center programs. Participants range from children 1 year old to elderly people up to 92 years old, from the cerebral palsied and epileptic to those with terminal cancer, strokes, and severe heart conditions.

Whether young or old, such handicaps had induced such fear or depression for some that they had withdrawn from normal social contact. The center's own methods and insights have been used: recreation included not only arts and crafts, sewing and simple cooking, games and hobbies, but reading and discussions, simple arithmetic, etc. Emphasis has been placed upon developing skills, interests and hobbies that can be enjoyed without constant super-

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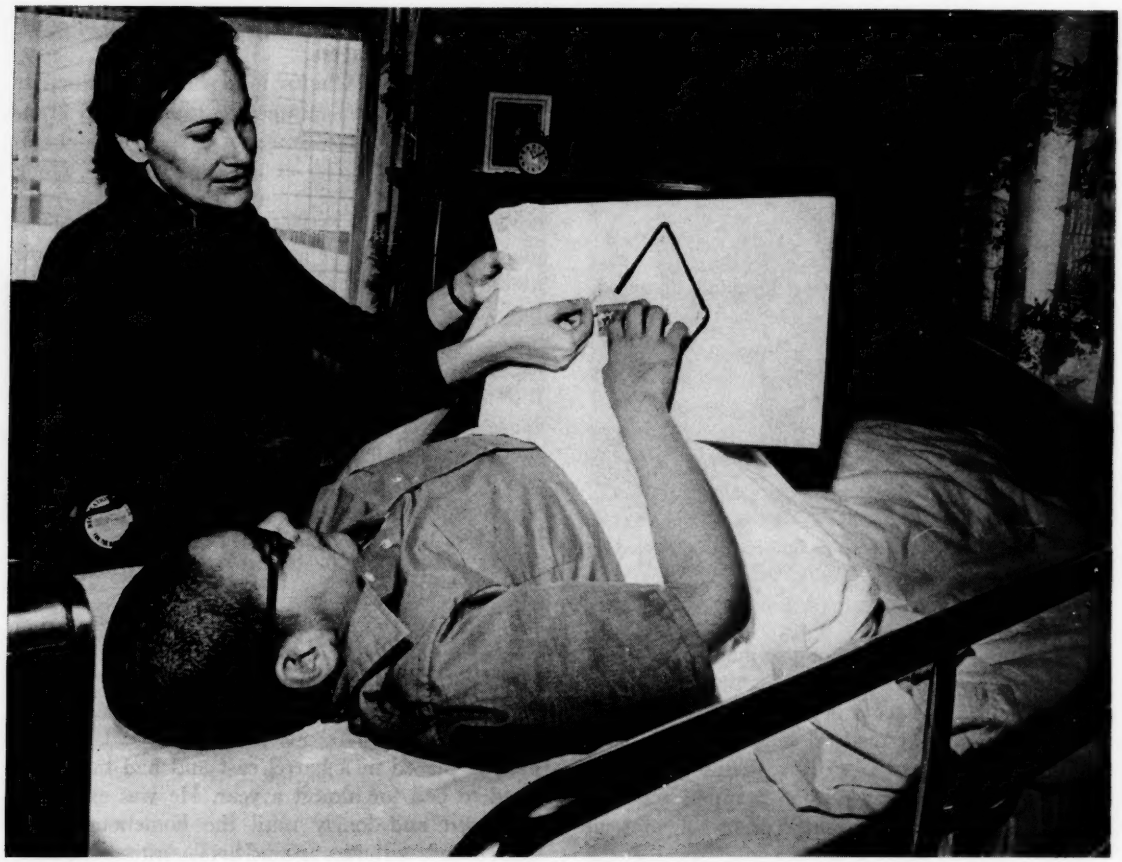
Mrs. Pomeroy is the founder and the director of the Recreation Center for the Handicapped, Inc., San Francisco. The mobile program described here is a part of the center program.



Born with cerebral palsy, Paul, who loved all kinds of sports, used to play a baseball game that was devised by a homebound staff member. He taught his parents the game, and he took great pride when he "beat the grown-ups." Paul died in November 1971.

vision and that can contribute to the home environment or even to the program itself (some of the clients are now helping others in arts and crafts, games, sewing, cooking, weaving, etc.). Training in simple health care, grooming, makeup, and hair styling is included and serves a dual purpose: to build personal pride and fulfillment, combined with increased pleasure for one's associates. Where feasible, shopping trips and excursions are scheduled, including use of public transportation.

The cardinal problem encountered in bringing the program to the participants is establishing a fruitful rapport, not only between the leader and the participant but often also between leader and parent or caretaker. In both cases, a one-to-one relationship is essential, at least at the outset, except in homes for the retarded where 8 to 10 are already being cared for and the program can be geared to social activities for the group. Frequently it takes 1 to 6 months to overcome the withdrawing tendency of those who have long lived solitary and sedentary lives.

We discovered that many older persons are not physically homebound and that the parents or guardians of some younger clients are themselves responsible for keeping them at home. In either case, fear, depression, long habit and sometimes all three had to be overcome. For those too profoundly retarded or depressed for group functioning, a homebound program is the only hope for reaching the ultimate goal: eventual integration into a group recreation setting in public recreation and park programs and/or in other caretaker or community facilities.

After 1 year, the pilot program has collected many heartening case histories. A small sampling is given at the end of this article. Three major groups have emerged as those with the greatest needs: 1) the older persons; 2) physically handicapped but not retarded; 3) severely retarded. For geriatrics, the

At 22, Mike acted like a 2-month-old baby. Until visited by homebound staff members, he was violently antisocial. He now is being taught to relate to others.

overwhelming problem is not so much lack of recreation as physical deprivation, which can mean everything from a decent bed to transportation for essential shopping or medical treatment (for older shut-ins, the last two are in themselves "recreation"). The nonretarded handicapped are most in need of small peer groups (preferably not all handicapped) to share common interests. For the severely retarded, increased training for their caretakers is the prime need, and caretakers themselves often express a wish to have such training.

In answer to the perceived need for homebound service, plans have been made to add a separate Division for Homebound Recreation to our three other major programs (children's day care, teen and adult programs). An October 1971 proposal for additional funding, including additional staff and an extra vehicle, was accepted by a local foundation. Upon grant expiration, the program will be incorporated into our regular budget.

Some Case Histories

• A 27-year-old retarded, blind, deaf, and speechless girl, formerly confined to her home, can now go to the park, ride the merry-go-round and slides, and enjoy touching and smelling.

• An 18-year-old mentally retarded girl was suspended in 1966 from the center because of violent anti-social behavior. She is now responding to her homebound leader, can be taken to public places, and will be joining excursions with a group of other handicapped teenagers.

• A 30-year-old Chinese man with neuromuscular atrophy has been encouraged to apply to San Francisco State College to complete his degree in chemistry, begun years ago at the University of Hong Kong.

• A 16-year-old with severe brain damage, weighing only forty pounds and unable to talk, can now identify objects (an apple, dog, etc.), indicating the beginning of understanding of the world around her.

• A 67-year-old diabetic woman, partially paralyzed by a stroke, now goes for a walk once a week, thus alleviating her medical condition, and her husband has requested twice weekly visits from the homebound staff.

• A 58-year-old stroke victim was referred by the San Francisco Home Health Service, which provides him with an attendant 4 hours daily. His wife feared to let him leave their walk-up apartment, but his doctor and the homebound staff persuaded her to let him try the stairs. Now he comes to the center twice a week to take art lessons and to socialize.

• A mentally retarded, cerebral palsied 12-year-old boy, had attended the center for the past 6 years. In early 1970, due to involved back surgery, he was placed in a barrel cast and had been confined to bed for almost a year. He was extremely depressed and lonely until the homebound staff geared their activities around his favorite sport, baseball. A Giants' yearbook was ordered for him and the announcers were asked to pay a special "hello" to him during one of the Giants' games. Homebound recreation had let him and his family know that the Recreation Center for the Handicapped was still very much in his life and that everyone was anxious for him to return to the center, possibly in November 1971. The homebound staff is gratified that it brought so much happiness to Paul up until the last day of his life: Paul died in November 1971, before he could return to the center's program.

Notes

(1) Space limitations prevent giving more details on this pioneer program. For further information, readers are referred to *A Proposed Plan for Conducting a Homebound Recreation Program for Severely Handicapped and Retarded Children and Adults,* 1970, which can be ordered from the Recreation Center for the Handicapped, Fleishhacker Pool Building, Great Highway and Sloat Boulevard, San Francisco, Calif. 94132.

(2) Also available are limited copies of *A Proposed Plan for Expanding the Homebound Recreation Program for Severely Handicapped and Retarded Children and Adults,* July 1971; and *Annual Report—Homebound Recreation for the Handicapped,* October 1971. These are available from the address given above.

Music and Gymnastics for Toddlers

E. J. Salomon

Our first cry signaling our entry into this world unconsciously starts the "music" and "gymnastics" which accompany us as long as we live.

There may be reasons why the normal rhythm, which culminates in normal speech and controlled movements of our body, is "out of order." Sooner or later, the child's mother or a doctor will notice this disorder. The baby, although it had started life with a normal, lusty cry, has become retarded.

It is of the utmost importance to start helping a retarded child as early as possible. Even though we are fortunate in receiving our toddlers at AKIM's Eddy Shore Day Nursery quite young, I still have to go back to arrive at the point in the development which has not been followed by the next "normal" step. When I have found "the missing link," the work of building a bridge, by means of exercises, can begin.

Our hearing sense starts almost at birth. Even when the actual hearing has been destroyed, it is possible for a deaf person to receive the vibration caused by a tone through the bones. Therefore, the primitive music of singing helps the gymnastics. Crawling, walking, jumping, whatever exercises the child is doing, or is done with my help, will be done to sound, to music, and very rhythmically at that.

There comes the time when every toddler jumps up and down like an engine. After a short while, he will add *his* music. This is an important step in his development and I am very glad when we reach that stage—even if the music thus produced is not pleasing to the ear. To produce sounds and to move rhythmically is normal and must be encouraged. I also try to develop their appreciation of music, and I have found that these retarded children are very sensitive to the beauty of the sound.

The instruments I use are the very best. The hoops and wooden balls with which the children play give off a pleasant tone. This is important because I combine music and gymnastics in a way so that the movement produces the sound, or the sound activates the movement. The clapping of hands (later with wooden sticks) strengthens the actual walking and helps the child to coordinate. A wide swinging movement will produce a long-lasting tone on the metallophone. A small wooden ball in a big hoop will produce, with a different movement, a different sound which the children are able to notice.

The children love their combined music and gymnastics lessons. Moreover, their improvement is often amazing. Children who could not control the movements of their limbs, not only follow perfectly a given rhythm, but are also able to translate movement into sound, produced by triangle, wooden sticks or xylophone.

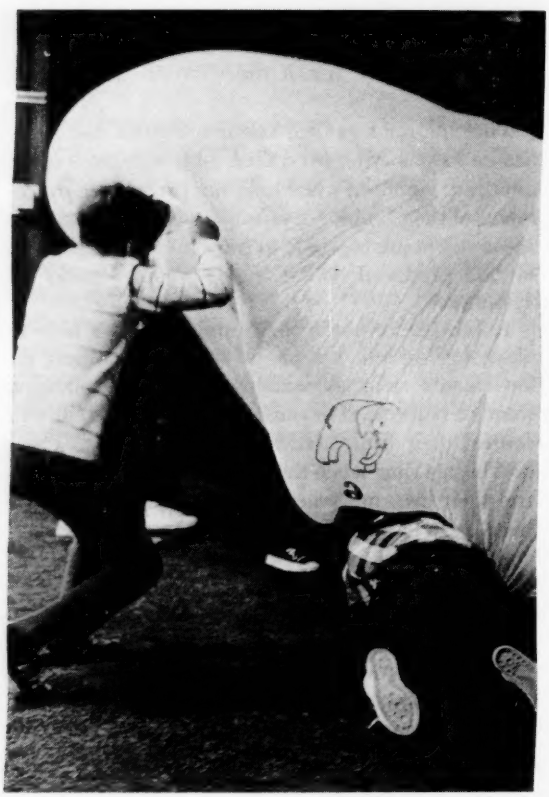
It takes quite some time until a child is able to play, e.g. on the xylophone, while the others do movements such as walking, standing, rolling a wooden ball, etc. They are proud of their ability to control their little friends with their music. There had been a time when they had not been able to control their own movements—this now seems to have been just a bad dream.

There obviously is a possibility of combining music and gymnastics in order to lay the foundation for speech. Sometimes the accent has to be put on the tone, sometimes on the rhythm. Often I have to activate the reaction of the diaphragm or to teach the child simply to yawn, laugh or shout.

There are many ways to help these children. The main thing is *never* say "impossible." ■

Mrs. E. J. Salomon teaches at the 'Eddy Shore' Day Nursery of AKIM, Jerusalem.

FUN AND LEARNING IN SIMPLE THINGS



"One of the basic needs of all children is new experiences in order to help total growth and development. Physical activity has its own unique contribution to make toward the provision of experiences, and since the MR are nearer the norm physically than they are mentally, we should be prepared to exploit it for the benefit of the mentally handicapped." So spoke James Oliver, Ph.D., Professor and Lecturer in Physical Education, Birmingham University, Birmingham, England. His remarks were presented at a physical education conference held in Oklahoma City, April 1971.

The photos presented here underline Dr. Oliver's contention that "play equipment doesn't have to be expensive or 'special.' " Fun and therapeutic games can be structured using such common items as hula hoops, tree stumps, and automobile tires. (Photo, upper left)

One of the photos shows what can be done with a parachute—in first, out first is one way of using it, or a team effort can loft the parachute to the ceiling for the wonderment of seeing it trap the air and descend slowly.

The remaining photo shows a group in a game of follow the leader—how close is the mimicry to the leader's motion? Motion, interpretation, visual perception, coordination are all involved in the process of following a simple instruction. ■

TRAVEL

Another Aspect of Rehabilitation

Bernard W. Albert

Several years ago a former patient of the Moss Rehabilitation Hospital in Philadelphia took a trip to Puerto Rico. This young, active quadriplegic was wheelchair bound and also was limited by a speech impairment. She spent a pleasant evening in her hotel. Upon retiring to her room she discovered that she could not pass through the doorway to the bathroom. For her to enter, the bathroom door would have to be removed from its hinges. She promptly called the desk clerk to make this request. It was necessary for her then to devote the next 20 minutes convincing hotel personnel that (1) she was not intoxicated, (2) she had a speech impairment, (3) she had a physical disability and that the wheelchair in which she sat exceeded the width of the door, and (4) the emergency was becoming more acute by the minute!

The above situation and dozens more demonstrated the need for a travel information center for persons with physical disabilities. As an additional expression of concern for the problem of post-hospital adjustment and the extent of meaningful living to which the former patient could aspire, our hospital created such a center. Physical and social confinement of all sorts and of varying degrees is one of the greatest difficulties faced by persons leaving rehabilitation facilities. The problem often negates the success effected in rehabilitation. The return to functional independence has enduring value only in relationship to the significant life activity the individual is able to re-embrace.

Proceeding upon the assumption that the physically disabled can and will travel if they can be assured of doing so with dignity and a minimum of physical discomfort, we devoted 2 years gathering information about travel accommodations. Letters of inquiry were directed to government tourist bureaus, public transportation carriers, hotels, popular resort areas, etc. Responses to the inquiries varied from sophisticated knowledgeability to a gross lack of information.

In the U.S. there are guide books for the disabled for most major cities, though some are currently out of date. The National Easter Seal Society for Crippled Children and Adults and the Paralyzed Veterans of America, Inc., have produced motel guides for the handicapped. The former agency has recently published an airline guide, and The President's Committee on Employment of the Handicapped has recently developed a guide book for disabled motorists. This Committee also developed a guide book to national parks and monuments.

England publishes wheelchair guides for almost a dozen cities, a vacation guide book, and a handbook for the disabled motorist. The hotel industry of one Latin American country responded by indicating they have no special facilities for the disabled, but gave assurances that the hotel service of their country was quite good and would provide "whatever help they would be in a position to offer." We also received enthusiastic responses such as a letter from a school for handicapped children in Brussels that offered their facilities gratuitously for a handicapped touring group if they wished to come when the children were on vacation.

From an African country we received advice that though they have a great many architectural barriers, these could be overcome by engaging local labor to provide physical assistance as the labor cost is quite minimal. Ireland provided published information in addition to the name of Dublin's manager of passenger transportation who could be called upon in the event of the need for special vehicles. Finland provided very specific information about accessibility of hotels, as did Indonesia which also offered the use of a guest house belonging to a rehabilitation center and its special vehicle.

New Zealand apologized for its lack of information, but spoke of its efforts to interest its automobile

Mr. Albert is Assistant Director, Moss Rehabilitation Hospital.

association to join in an undertaking to compile such data. Israel recommended specific hotels and offered to lend ramps which are adaptable to buses for touring groups. Hong Kong and Greece spoke of their ability to accommodate, though the latter expressed concern about adequate touring vehicles.

This conglomeration of information was organized by a librarian and a corp of volunteers were recruited, familiarized with the information, and instructed as to their functions in responding to inquiries from the community.

Mass media was most cooperative and highly effective in making the public aware of the service. In addition, a brochure was developed and quantities were distributed to health and welfare agencies dealing with the physically handicapped.

After 10 months of active service the hospital has received slightly over 700 inquiries from across the U.S. Additionally, requests have come from Canada and from South America. Most inquiries have come from individual families with a disabled member. However, many were also received from government agencies, public libraries, rehabilitation treatment centers, schools, etc.

Followup letters are sent to returning travelers when this information is available. The traveler is requested to evaluate the material which was provided and also requested to submit additional information they may have acquired by virtue of their experience.

Feedback letters have been modest in quantity (likely reason being the recency of the service) but most encouraging in nature. Many letters have expressed appreciation that the service exists. Others indicate that the more adventurous have traveled, some quite extensively, and simply "take their chances." This latter group was pleased about the opportunity to plan more skillfully.

Though the institution's experience in this area has not been extensive, several needs have been identified. Some of the more well-defined are as follows:

- The development of a similar service in other major cities;
- The development of a travel newsletter;
- Convincing travel magazines to establish a special column in their publications on this subject;
- Urging the American Automobile Association to incorporate existing data in their tour books;
- Conducting regional symposia for travel agents to thoroughly acquaint them with the subject;

Golf pro instructs blind youth in New York's Industrial Home for the Blind day camper program.
Photo courtesy IHB Reporter

- That the Hotel & Motel Association continuously remind its membership to eliminate architectural barriers on new construction and to utilize the symbol of accessibility;
- That regulations on air travel for the physically handicapped be refined to eliminate existing inconsistencies in policy.

Historically, persons with physical disabilities have basically been an invisible minority and consequently an unknown and unthought of group. In addition to the inherent pleasure of travel that can be and is derived by the handicapped person, we believe that their greater immergence and presence everywhere will have an educative effect upon every dimension of society.

Travel information on our leaflet, *Find Your Place In The Sun,* may be obtained from the following address: Travel Information Center, Moss Rehabilitation Hospital, 12th Street and Tabor Road, Philadelphia, Pa. 19141.

U.S. GOVERNMENT PRINTING OFFICE: 1972

REHABILITATION RECORD

The weakest ink is better than the strongest memory

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Published by

Rehabilitation Services Administration

Edward Newman
Commissioner

Ron Bourgea, Editor
Room 3217, HEW South Building
Washington, D.C. 20201

Use of funds for printing the Rehabilitation Record was approved by the Director of the Bureau of the Budget, January 5, 1966. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price 55 cents (single copy). Subscription price: $3 per year, 75 cents additional for foreign mailing.

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